DOCUMENT RESUME

ED 206 910 CE 030 102

AUTHOR	Smith, Frederick R.
TITLE	Hospital Corpsman 1 & C. Rate Training Manual and Nonresident Career Course. Revised.
INSTITUTION	Naval Education and Training Command, Washington, D.C.
REPORT NO	NAVEDTRA-10670-B
PUB DATE	81
NOTE	302p.
EDRS PRICE	MF01/PC13 Plus Postage.
DESCRIPTORS	Allied Health Personnel; Behavioral Objectives; *Correspondence Study; Enlisted Personnel; Health Occupations; Hospital Personnel; Independent Study; Inservice Education; *Medical Assistants; Medical Evaluation; *Medical Services; *Military Training; Postsecondary Education; Preventive Medicine; Primary Health Care; *Programed Instructional Materials
IDENTIFIERS	Navy

ABSTRACT

This Rate Training Manual (RTM) and Nonresident Career Course (NRCC) form a self-study package that will enable Navy senior hospital corps personnel to fulfill the requirements of their rating. While primarily developed around the requirements for personnel serving on independent duty, the information contained within it is applicable to all HM 1 & C personnel. Among the requirements discussed are the abilities to supervise and conduct sick call, including history taking, examination, diagnosing, and treating of sick call and emergency patients; recognizing and treating emergency dental conditions; performing health care inspections; performing and interpreting the results of elementary laboratory procedures; discharging environmental and preventive medicine functions such as sewage and refuse disposal, sexually transmitted disease contact interviewing and reporting, and food service sanitation procedures; ordering, receiving, and issuing supplies and maintaining the associated accounting records; administering mass immunizations; preparation and maintenance of medical and personnel records; executing the various aspects of the Decedent Affairs Program; ensuring compliance with rules and regulations for security practices and procedures; and performing the general duties connected with the administration of medical departments ashore and afloat. Designed for individual study and not formal classroom instruction, this RTM provides subject matter directly related to the occupational qualifications of the HM 1 & C rating. The NRCC provides the usual way of satisfying the requirements for completion of this RTM. The set of assignments in the NRCC includes learning objectives and supporting items designed to lead students through the RTM. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED206910

CE030102
CE030100

HOSPITAL CORPSMAN 1 & C

NAVAL EDUCATION AND TRAINING COMMAND

RATE TRAINING MANUAL AND NONRESIDENT CAREER COURSE

NAVEDTRA 10670-B

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
● Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Although the words "he", "him", and "his", are used sparingly in this manual to enhance communication, they are not intended to be gender driven nor to affront or discriminate against anyone reading *Hospital Corpsman 1 & C*, NAVEDTRA 10670-B.

The inclusion of names of any specific commercial product, commodity, or service in this publication is for information purposes only and does not imply endorsement by the Navy.

Naval Education And Training Program Development Center

HOSPITAL CORPSMAN 1 & C

NAVEDTRA 10670-B

DEPARTMENT OF THE NAVY
CHIEF OF NAVAL EDUC AND TNG

1981 Edition Prepared by
HMC Frederick R. Smith

PREFACE

This Rate Training Manual and Nonresident Career Course (RTM/NRCC) form a self-study package that will enable senior Hospital Corps Personnel to help themselves in fulfilling the requirements of their rating. While primarily developed around the requirements for personnel serving on independent duty, the information contained within is applicable to all *HM 1 & C* personnel. Among the requirements discussed are the abilities to supervise and conduct sick call, including history taking, examination, diagnosing, and treating of sick call and emergency patients; recognizing and treating emergency dental conditions; performing health care inspections; performing and interpreting the results of elementary laboratory procedures; discharging environmental and preventive medicine functions such as sewage and refuse disposal, sexually transmitted disease contact interviewing and reporting, and food-service sanitation procedures; ordering, receiving, and issuing supplies and maintaining the associated accounting records; administering mass immunizations; preparation and maintenance of medical and personnel records; executing the various aspects of the Decedent Affairs Program; ensuring compliance with rules and regulations for security practices and procedures; and performing the general duties connected with the administration of medical departments ashore and afloat.

Designed for individual study and not formal classroom instruction, this RTM provides subject matter directly related to the occupational qualifications of the *HM 1 & C* rating. The NRCC provides the usual way of satisfying the requirements for completion of this RTM. The set of assignments in the NRCC includes learning objectives and supporting items designed to lead students through the RTM.

This manual and NRCC were prepared by the Naval Health Sciences Education and Training Command, National Naval Medical Center, Bethesda MD 20014, under the supervision of the Bureau of Medicine and Surgery, Washington DC 20372.

Revised 1981

Stock Ordering No.
0502-LP-053-3505

Published by
NAVAL EDUCATION AND TRAINING PROGRAM
DEVELOPMENT CENTER

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON, D.C.: 1981

THE UNITED STATES NAVY

GUARDIAN OF OUR COUNTRY

The United States Navy is responsible for maintaining control of the sea and is a ready force on watch at home and overseas, capable of strong action to preserve the peace or of instant offensive action to win in war.

It is upon the maintenance of this control that our country's glorious future depends; the United States Navy exists to make it so.

WE SERVE WITH HONOR

Tradition, valor, and victory are the Navy's heritage from the past. To these may be added dedication, discipline, and vigilance as the watchwords of the present and the future.

At home or on distant stations we serve with pride, confident in the respect of our country, our shipmates, and our families.

Our responsibilities sober us; our adversities strengthen us.

Service to God and Country is our special privilege. We serve with honor.

THE FUTURE OF THE NAVY

The Navy will always employ new weapons, new techniques, and greater power to protect and defend the United States on the sea, under the sea, and in the air.

Now and in the future, control of the sea gives the United States her greatest advantage for the maintenance of peace and for victory in war.

Mobility, surprise, dispersal, and offensive power are the keynotes of the new Navy. The roots of the Navy lie in a strong belief in the future, in continued dedication to our tasks, and in reflection on our heritage from the past.

Never have our opportunities and our responsibilities been greater.

CONTENTS

CHAPTER Page

1. Advancement 1-1
2. Physical Diagnosis 2-1
3. Diet Therapy 3-1
4. Prescription Writing and Filling 4-1
5. Preventive Medicine 5-1
6. Medical Aspects of Chemical, Biological, and Radiological Defense 6-1
7. Clinical Laboratory 7-1
8. Naval Organization 8-1
9. Naval Manuals, Directives, and Reports 9-1
10. Navy Correspondence and Classified Information 10-1
11. Personnel Records and Accounting 11-1
12. Navy Medical Finance and Supply 12-1
13. Decedent Affairs 13-1

INDEX I-1

Nonresident Career Course follows Index

Parts of this Rate Training Manual are based on the *Manual of the Medical Department* (MANMED). Change 95, a major revision of much of the MANMED, was distributed too late for the changes to be reflected in this publication. If there are conflicts between the publications, use the MANMED as the most recent source.

CHAPTER 1

ADVANCEMENT

This training course is designed to help you meet the occupational (technical) qualifications for advancement to HM1 and HMC. Chapters 2 through 13 of this training manual deal with the technical subject matter of the hospital corpsman rating. The present chapter provides introductory information that will help you in working for advancement. It is important that you study this chapter carefully before starting your study on the remainder of this training course.

YOUR HORIZON BROADENS

Advancement in rating brings both increased rewards and responsibilities. The time to start looking ahead and considering the rewards and responsibilities is now, while you are studying this course and preparing for advancement.

By this time you are probably well aware of the many advantages of advancement—higher pay, greater prestige, more interesting and challenging work, and the satisfaction of getting ahead in your chosen profession. You have probably also discovered that one of the most enduring rewards is the personal satisfaction you find in developing your skills and increasing your knowledge.

The Navy also benefits by your advancement. Highly trained personnel are essential to the functioning of the Navy. Each advancement in rating increases your value to the Navy in two ways. First, you become more valuable as a technical specialist in your own rating; second, you become more valuable as a person who can supervise, lead, and train others. This increased value enables you to make far-reaching and long-lasting contributions to the Navy.

In large measure, the extent of your contribution to the Navy depends on your willingness and ability to accept increasing responsibilities as you advance. When you assumed the duties of an HM3, you began to accept responsibility for the work of others. With each advancement you accept increasing responsibility in military matters as well as in matters relating to the occupational requirements of your rating.

You will find that your responsibilities for military leadership are about the same as those of petty officers in other ratings, since every petty officer is a military person as well as a technical specialist. Your responsibilities for technical leadership are special to your rating and are directly related to the nature of your work. Tending the sick and wounded is an important job, and it's a teamwork job; it requires a special kind of leadership ability that can be developed only by technically competent personnel who have a deep sense of personal responsibility.

The practical details relating to your responsibilities for medical department administration, supervision, and training are discussed in the remaining chapters of this training course. At this point, let's consider some of the broader aspects of your increasing responsibilities for military and technical leadership.

Your responsibilities will extend both upward and downward. Both officer and enlisted personnel will expect you to translate the general orders given by superiors into detailed, practical on-the-job language that can be understood and followed by relatively inexperienced persons. When you deal with your juniors, it is up to you to see that they do their work properly. At the same time, you must be able to explain to officers any important needs or problems of the enlisted men.

You will have regular and continuing responsibilities for training. Even if you are lucky enough to have highly skilled and well trained hospital corpsmen working for you, you will still find that training is necessary. For example, you will always be responsible for training lower rated personnel for advancement in rating. Also, some of your best workers may be transferred, inexperienced or poorly trained personnel may be assigned to you, or a particular job may call for skills that none of your personnel have. These and similar problems require that you be a training specialist who can conduct training programs and train individuals and groups in executing their tasks.

You will have increasing responsibilities for working with others. As you advance to HM1 and then to HMC, you will find that many of your plans and decisions affect a large number of people, including some who are not members of the Medical Department. It is therefore important that you understand the duties and responsibilities of personnel in other ratings, especially those with whom you have interdepartmental dealings. Every petty officer in the Navy is a technical specialist in his or her own field. Learn as much as you can about their work so that it will fit in with the overall mission of the organization.

As your responsibilities increase, your ability to communicate clearly and effectively must also increase. The basic requirement for effective communication is a knowledge of your own language. Use correct language in speaking or writing. Remember that the basic purpose of all communication is understanding. To lead, supervise, and train others, you must be able to communicate in such a way that others can understand exactly what you mean.

A second requirement for effective communication in the Navy is a knowledge of the Navy way of saying things. Some Navy terms have been standardized to ensure communication. When a situation calls for the use of standard Navy terminology, use it.

Another requirement of effective communication is precision in the use of technical terms. A command of the technical language peculiar to the Medical Department allows you to receive and convey information accurately and to exchange ideas with others. Persons who do not understand the meaning of terms used in connection with the work of their own rating are at a disadvantage when they try to read official publications. They are also at a great disadvantage when they take the written examination for advancement. Although it is always important for you to use technical terms correctly, it is especially important when you are dealing with lower rated personnel; sloppiness in the use of technical terms is likely to be very confusing to them.

You will have increased responsibilities for keeping up with new developments. Practically everything in the Navy—policies, procedures, systems—is subject to change and development. You must keep yourself informed of all changes and new developments that might affect your rating or your work.

Some changes will be called directly to your attention, others you will have to look for. Try to develop a special alertness for new information. Keep up-to-date on all available sources of technical information. Publications of continuing interest to supervisors in the Medical Department are "U.S. Navy Medicine" and all notices and instructions, especially those from BUMED.

REQUIREMENTS FOR ADVANCEMENT

In general, to qualify for advancement you must:

1. Have a certain amount of time in grade

2. Complete the required military and occupational training courses.

3. Demonstrate the ability to perform all the practical requirements for advancement by completing the Personnel Advancement Requirement (PAR), NAVPERS 1414/4 (formerly NAVPERS 1414/1).

4. Be recommended by your commanding officer.

5. Demonstrate your knowledge by passing a written examination based on:

(a) the military requirements for advancement and
(b) the occupational qualifications for advancement in the hospital corpsman rating.

Advancement in rating is not automatic. Meeting all requirements makes you eligible but does not guarantee your advancement. The factors that determine which persons, out of all those who take the examinations, will actually be advanced are the scores made on the written examination, the length of time in service, the performance marks of the individual, and the quotas set for the rating.

Remember that the requirements for advancement may change from time to time. Check with your division officer or training officer to be sure you meet the most recent requirements when you are preparing for advancement or helping others to prepare for it.

To prepare for advancement you need to be familiar with:

1. the occupational standards for the hospital corpsman rating found in the *Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards,* NAVPERS 18068 series,
2. the Personnel Advancement Requirement (PAR), NAVPERS 1414/4,
3. appropriate Navy training courses, and
4. any other material that may be required or recommended in the current edition of *Bibliography for Advancement Study,* NAVEDTRA 10052.

These materials are discussed later in this chapter under Sources of Information.

THE HOSPITAL CORPSMAN RATING

The primary mission of the hospital corpsman is to minister to the sick and wounded. Hospital corpsmen work in a fantastic variety of jobs associated with the care of the sick and wounded. Their versatility ranges from general service hospital corpsmen to highly trained and specialized technicians in blood banks and radioisotope and research laboratories.

The most challenging assignment for an individual who has graduated from Advanced Hospital Corps School is independent duty—duty aboard ship or a submarine or at a remote station, independent of a medical officer—where knowledge tempered with maturity and good judgment is of extreme value.

Hospital corpsmen are assigned to ships and stations throughout the world, including Marine Corps units, ashore and afloat. Whatever their technical specialties, whatever their billets, their function is always related to the care of the sick and wounded.

SCOPE OF THIS TRAINING COURSE

Before studying any book, it is a good idea to know the purpose and the scope of the book. Here are some of the things you should know about this training course:

It is designed to give you information on the occupational (technical) qualifications for advancement to HM1 and HMC.

The occupational (technical) qualifications that were used as a guide in the preparation of this training course were taken from the *Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards* NAVPERS 18068 series. Any later changes in the hospital corpsman qualifications may not be incorporated in this training course. It is therefore important for you to obtain and study a set of the most recent hospital corpsman qualifications.

This training course includes information that is related to both the knowledge factors and the practical factors of the qualifications for advancement. But no training course can take the place of actual on-the-job experience for developing skills. The training course can help you understand some of the hows and whys, but you must combine knowledge with experience before you can develop the required skills. The Personnel Advancement Requirement (PAR), NAVPERS 1414/4, should be used along with this training course whenever possible.

The following chapters of this course deal with the technical subject matter of the hospital corpsman rating. Before studying these chapters, study the table of contents and note the arrangement of information. You will find it helpful to get an overall view of the organization of this training course before you start to study it.

SOURCES OF INFORMATION

It is very important for you to have an extensive knowledge of the references to consult for detailed, authoritative, up-to-date information on all subjects related to the military standards and to the occupational qualifications of the hospital corpsman rating.

Some of the publications discussed here may change from time to time, others as the need arises. When you use a publication that is subject to change or revision, be sure you have the latest edition. When using any publication that is kept current by means of changes, be sure you have a copy in which all changes have been entered.

NMPC PUBLICATIONS

The NMPC publications described here include some that are essential for anyone seeking advancement and some that are extremely helpful even though not essential.

Occupational Standards

The *Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards,* NAVPERS 18068 series, gives the minimum occupational (technical) standards for advancement in rate from P03 to MCPO. Keep in mind that these are the minimum standards required for advancement to each rate within each rating. You are responsible for meeting all of the standards specified for advancement to the rate level you are seeking and all standards specified for all lower rate levels. Remember also that changes to the occupational standards are issued more frequently than rate training courses can be revised. So you must always check the latest requirements for advancement in rating.

Personnel Advancement Requirement (PAR)

The Personnel Advancement Requirement (PAR), NAVPERS 1414/4 (formerly 1414/1, Record of Practical Factors), is used to individualize advancement requirements for each rating and to provide a consolidated checklist for individuals preparing for advancement and for commands in evaluating advancement readiness.

PAR is presented in three sections:

1. Section I lists the administrative requirements;

2. Section II lists the formal school and other training requirements (if any) and recommended training for improved performance in rating; and

3. Section III lists occupational and military ability requirements.

This section is based on the current occupational standards as published in Section I, *Manual of Navy Enlisted Manpower and Personnel Qualifications and Occupational Standards,* NAVPERS 18068 series. It contains broad statements based on approved military and occupational standards of what a person must be able to do at the next higher pay grade, whereas the Bibliography Sheet provides a verbatim listing of these standards applicable to an examination.

As changes are made to the occupational standards, new forms of NAVPERS 1414/4 are issued as necessary. If a person shows proficiency in some skill not listed as a minimum qualification but falls within the general scope of the rating, ensure that an entry is made in the space provided for that purpose.

The PAR is kept in the service record and should be forwarded with the service record to the next duty station. Each person should keep a copy for his or her own use.

Bibliography for Advancement Study

The *Bibliography for Advancement Study,* NAVEDTRA 10052, is an important publication for any enlisted person preparing for advancement. It lists required and recommended rate training manuals and other materials to be studied by personnel working for advancement.

NAVEDTRA 10052 is revised and issued each year by the Chief of Naval Training. Each revised edition is identified by a letter following the NAVEDTRA number. Be sure you have the most recent edition.

If extensive changes in qualifications occur in a rating between the annual revisions of NAVEDTRA 10052, a supplementary list of study materials may be issued in the form of a directive. When you are preparing for advancement, check to see if changes have been made in the qualifications for your rating. If changes have been made, see if a directive has been issued to supplement NAVEDTRA 10052.

The required and recommended references are listed by pay grade in NAVEDTRA 10052. If you are working for advancement to HM1, study the materials listed for the HM1 level and all levels below it. If you are working for advancement to HMC, study the materials listed for the HMC level and all lower rate levels.

It should be noted that publications listed for a given pay grade frequently make specific reference to other publications. These referrals are part of the total bibliography, and examinations are based on this total bibliography.

In using NAVEDTRA 10052, you will notice that some rate training manuals are marked with an asterisk (*). Any manual marked in this way is mandatory, that is, it must be completed at the indicated rate level before you are eligible to take the service wide examination for advancement. Each mandatory rate training manual may be completed by:

1. passing the nonresident career course (NRCC) based on the manual;
2. passing locally prepared tests based on the information given in the rate training manual; or
3. in some cases, satisfactory completion of an appropriate Navy school.

It is important to note that all references, mandatory or recommended, listed in NAVEDTRA 10052 may be used as source material by the writers of the examinations for advancement in rating.

Navy Training Courses

Navy training courses are written for the specific purpose of helping personnel prepare for advancement. Some courses are general in nature and are intended for use by more than one rating; others (such as this one) apply to the particular rating.

Navy training courses are revised from time to time to bring them up-to-date. The revision is identified by a letter following the NAVEDTRA number. You can tell whether a Navy training course is the latest edition by checking the NAVEDTRA number in the most recent edition of the *List of Training Manuals and Correspondence Courses,* NAVEDTRA 10061.

There are three Navy training courses that are prepared only to present information on the military standards for advancement to HM1 or HMC. These courses are:

Basic Military Requirements, NAVPERS 10054,
Military Requirements for Petty Officer 3 & 2, NAVPERS 10056, and
Military Requirements for Petty Officer 1 & C, NAVPERS 10057.

Each of the military requirements courses is mandatory at the indicated rate levels. In addition to giving information on the military standards, these three books give information on the enlisted rating structure; how to supervise, train, and lead other men; and how to meet your increasing responsibilities as you advance in rating.

Other NMPC Publications

Additional NMPC publications that you may find useful in connection with your responsibilities for leadership, supervision, and training include:

the *Manual for Navy Instructors,* NAVEDTRA 16103,
the *Navy Training Bulletin,* NAVEDTRA 14900,
Quarterly *Training Information Procedures (TIPS),*
the *Manual of Advancement,* BUPERSINST 1430.16 series.

the *Bureau of Naval Personnel Manual,* NAVPERS 15791B,

the *Correspondence Manual,* SECNAVINST. 5216.5B,

the *Department of the Navy Information Security Program Regulation,* OPNAVINST. 5510.1 series, and

the *Naval Telecommunications Procedures/Telecommunications Users Manual,* NTP3.

TRAINING FILMS

Training films available to Navy personnel are a valuable source of supplementary information on many technical subjects. Films that may be of interest are listed in the United States Navy Film Catalog, NAVAIR 10-1-777 and the Naval Health Sciences Education and Training Command Medical Film Catalog, 1974 (reprinted in 1978 with addendum).

CHAPTER 2

PHYSICAL DIAGNOSIS AND TREATMENT

PHYSICAL DIAGNOSIS

The first concern of the hospital corpsman when confronted with a patient is diagnosis. When a patient comes to sick call, it is a must to obtain a careful history first, followed by a careful physical examination, diagnosis, and treatment.

The medical history plus the physical examination form the basis for establishing the diagnosis and instituting a course of treatment. The medical history makes the physical examination more meaningful and not just a mechanical routine.

The patient may be confused, nervous, fearful, insecure, resentful, and even argumentative. To deal with these emotions and attitudes, you will need a professional bedside manner. This can be achieved by cultivating a professional attitude, sincerity, understanding, mental maturity, and compassion. Corpsmen should never allow themselves to take a moralistic attitude or to condemn or condone a patient's behavior.

The history taking begins when the patient arrives in sick call. The patient should be observed for any overt signs and symptoms, reactions to questions, alertness, attitude toward the corpsman and his or her illness, and level of intelligence. Before asking the patient direct questions, the corpsman should let the patient talk freely and listen to the patient's story. Remember, listening is an art.

When the patient has related the story in his or her own words, it is time to ask specific questions. Keep the questions simple and on the patient's level. Ask the patient to describe the symptoms, including their duration, nature, location, date and type of onset, and what relieves or aggravates them. Remember that each history is an individual experience and should not be stereotyped but rather adjusted to each individual's specific problem. Fear, confusion, rambling, exaggeration, and minimization are obstacles to eliciting a good medical history. They must be overcome to get the data necessary to establish a diagnosis.

The following outline is a helpful guideline to use in obtaining the medical history.

- Biographical Data—Obtain the patient's full name, age, sex, race, SSN, nationality, marital status, and occupation.

- Chief Complaint—Main reason for coming to sick call.

- History of Present Illness—Phrase questions so that the patient provides the needed information, and try to avoid leading questions. The patient should describe discomfort or unpleasant sensations. Have the patient elaborate on the chief complaint, including the date, mode, course, and duration of onset. Find out how each symptom first made its appearance, whether it was abrupt or gradual, how long it lasted, and whether it was persistent or intermittent. Determine the location and whether or not it radiates and where it radiates to. Determine if there are any lesser symptoms that accompany the major complaint. Note any absences or cessations of the symptoms and any cycles they undergo. Elicit information regarding any previous or self-treatment and the effect of such treatment.

- Past History—Review past illnesses, surgical procedures and dates thereof, and all major injuries.

- Family History—Obtain the health status of blood relatives, including their age if living and the cause of death if deceased.

- Social History—The patient's personal habits, sex life, emotional adjustments, and work and recreational habits are of importance.

- Marital History—Health of spouse, sexual adjustment, number of children and their health, and the emotional status of the marriage. NOTE: Depending upon the circumstances and the type of the patient's complaint, not all questions are pertinent and should not be asked of the patient in every case.

- Occupational History—Where the patient works, what he or she does, who he or she works for, how long in that position, health hazards in that area, and recent changes in position or authority may be important points to explore.

A comprehensive account of complaints referable to each body system in logical sequence from head to toe should be made a part of the history. This review provides a thorough evaluation of the past and present status of each body system. It also permits the grouping of like symptoms and provides a double check to prevent omissions of significant data concerning the present illness or injury. The following is merely a suggested guideline to follow and should not be interpreted as a hard and fast rule of thumb. Again, each case is unique and should not be stereotyped.

- Body Weight—Determine the average, maximum, and least weight for the individual, and check for loss or gain in weight and the time interval between such loss or gain.

- Skin, Hair, and Nails—Check the texture for dryness, sweating, discolorations, itching, changes in temperature, dermatological conditions and therapeutic efforts to control them, and baldness and itching of the scalp.

- Head—Determine if there are headaches, their frequency, duration, and what time of day they occur; be alert for and determine the presence or absence of vertigo, lightheadedness, fainting, and any signs of trauma.

- Eyes—Ask about disturbances in vision, lacrimation, itching, photophobia, and pain.

- Ears—Determine degree of deafness (if suspected), pain, discharge, vertigo, and tinnitus.

- Nose—Note any discharge or obstructions. Ask the patient if he or she is subject to frequent colds or allergies and if there has been any change in the sense of smell.

- Mouth and Throat—Ask about pain and history of bleeding gums, sore throats, voice changes, and dysphagia (difficulty in swallowing), and look for indications of dental hygiene habits.

- Neck—Determine if there are stiffness, swelling, pain and associated symptoms of lymph node enlargement, and limitation of motion.

- Cardiorespiratory System—Check for complaints of dyspnea, orthopnea, edema, cough (productive or nonproductive, and if productive, odor and color as well as amount of sputum), pain, wheezing, palpitation, syncope, cyanosis, hypertension, hoarseness, and stridor (harsh or high-pitched respirations).

- Gastrointestinal System—Ask about changes in appetite, complaints of dysphagia, pyrosis, indigestion, nausea, vomiting, blood in stool or vomitus, flatulence, jaundice, pain, changes in bowel habits, constipation, diarrhea, and hemorrhoids.

- Genitourinary System—Ask about frequency of urination, including urgency, hesitation, pain, blood, absence or diminishing amount, pus, color, and dribbling or incontinence; and check for past or present evidence of sexually transmitted diseases (STD).

- Nervous System—Check for feelings of anxiety, apprehension, tremors, convulsions, history of psychiatric care, changes in memory, changes in judgment, pain, paresthesia (numbness), paralysis, and coordination.

- Musculoskeletal System—Note the presence of muscular pain, swelling, deformity, disability or pain in joints, weakness, atrophy, cramps, varicosities, phlebitis, and impaired circulation in the extremities.

PHYSICAL EXAMINATION

After getting as much information as possible from questioning, a physical examination must then be performed. In general, use the same system format that was employed in taking the medical history. (NOTE: As stated in the section on history taking, depending upon the complaint of the patient and your suspicions of his or her illness, it is not necessary to perform a complete physical examination in every case.)

- Skin—The human skin, which is sometimes referred to as the ''mirror''of an individual's health because it often reflects diseases of the other organs, should be examined visually and also by palpation and auscultation. Observe for visible abnormalities such as warts, cysts, scales, and vesicles. An important point to remember in the visual examination of the skin is color. Changes in coloration are often tipoffs to various ailments; for example, a bluish tinge can indicate congestive heart failure, pneumonia, or any other condition in which the oxygen content of the hemoglobin is reduced. Changes in skin coloration can also be caused by abnormal deposits of pigmentation such as increases of bilirubin in the skin and sclera as found in jaundice. Note the temperature, texture, elasticity, moisture, and presence or absence of edema. It is important to include the epidermal appendages in the examination of the skin; for example, note the condition of the nail beds (matrix) since abnormalities in the matrix can often indicate local or systemic disorders. Condition of the hair can also indicate local or systemic disorders such as coarse, dry, and brittle hair as found in many cases of hypothyroidism.

- Head—Look for any abnormal head movements such as spasms, tremors, and tilting. Note the size and shape of the head. Note any signs of swelling, discolorations (especially in facial bones), and bloody or watery discharge from the nose and ears. Test the sections over the sinuses by palpation and percussion to detect any signs of tenderness. Check for range of motion (provided there is no neck injury). Inspect the eyes for normal extraocular movements, equality of pupils, pupillary reaction to light, and accommodation. Check for position and alignment of the eyes, abnormal protrusions, recessions, and spacing; note position of the eyelids to the eyeballs; observe for swelling of the lacrimal apparatus; note any opacities in the lens and cornea and swellings or nodules in the conjunctiva and sclera. Examine the oral cavity for signs of bleeding or inflamed gums, coating or swelling of the tongue, ulcers, inflamed throat, pus, and condition of the teeth.

- Neck—When inspecting the neck, look for any signs of asymmetry, unusual pulsations, growths, stiffness or limitation of movement, enlargement of the thyroid gland, and swollen lymph nodes behind the ears, on the sides of the neck, and in the supraclavicular area. Test swallowing ability.

- Ears, Nose, and Throat—When inspecting the ears, include the external ear. This area is sometimes so obvious that it is often overlooked. Examine the external auditory canal for any signs of wax or trauma. Note the position, color, and shape of the tympanic membrane. Look for signs of blood, pus, redness, or swelling. Test for hearing loss by using a tuning fork, a ticking watch, or the human voice. Observe the nose for signs of swelling or trauma. Use a nasal speculum to check for obstructions, redness, and infection. Inspect the throat for signs of blood, pus, redness, swelling, tenderness, and any swellings or growths. Check the condition of the teeth, gums, tongue, palate, tonsils, and uvula.

- Respiratory System—Determine if the patient is coughing and if the cough is productive or nonproductive. If productive, examine the sputum for quantity, color, viscosity, and odor.

Look for skeletal deformities or funnel chest and exaggerated or abnormal posture. Check the accessory respiratory muscles in the neck for deformity. Take note of rate, depth, symmetry, and pattern of respirations. Palpate the chest wall for tenderness, crepitation, masses, and abnormal pulsations. Palpate for any signs of vibrations or thrills. Percuss the chest for signs of resonance, hyperresonance, tympany, dullness, and flatness. Use a stethoscope to auscultate for abnormal breath sounds such as rales, rhonchi, and wheezing. Listen for abnormal voice sounds.

- Cardiovascular System—Place the patient in a supine position. Palpate the chest wall in the area of the left midclavicular line to detect thrills, rate, rhythm, and precardial heave. Record blood pressure and pulse. Auscultate the heart for abnormal sounds such as friction rubs and heart murmurs.

- Gastrointestinal System—Inspection, auscultation, percussion, and palpation are of significant value in examining the gastrointestinal system. Most of the information gathered from the examination will be from palpation. Always perform palpation last because some findings of auscultation can be markedly altered by manipulation of the abdomen. Place the patient in a supine position with the head slightly elevated. Visually inspect the exposed skin from the sternum to the pubis. Observe for symmetry, masses, and general nutritional state. Note the presence of scars, stretch marks, blemishes, a visible hernia, or abdominal distension. Auscultate to detect any abnormal peristalsis sounds, friction rubs, and bruits (e.g., a splashing or blowing sound). Percuss the abdominal area to detect the presence of tumors, fluid, distension, and enlargement of the underlying organs. Palpation of the abdominal walls is the most important of all the steps and the most difficult to perform. First, make sure your hands are warm. Start to palpate by placing your hand in an area where there is no pain and gently move your hand over the entire abdomen. Note any enlargements or masses and any pain produced. When examining the abdomen, you should be alert for any sign of a hernia. There are three types of abdominal hernias: ventral—soft masses that protrude into the abdominal wall anteriorly; inguinal—a protrusion of peritoneum through the abdominal wall in the inguinal area; and femoral—located on the anterior surface of the thigh just below the inguinal ligament. The last part of the examination is the rectal. This part of the examination is crucial and should be performed in every case involving the gastrointestinal tract. The perianal area should be inspected for lesions and external hemorrhoids. Also palpate the anal canal for tumors, polyps, masses, and tenderness. The prostate should be palpated for size, shape, and consistency. After withdrawing the gloved hand from the rectum, check the character of any stool that may be on the glove, and perform a guaiac test.

- Genitourinary System—Inspect the lower abdomen and flank area for any signs of tenderness if kidney involvement is suspected. Whenever possible, do a microscopic examination of the urine. Examine the genitalia for signs of discharge, ulcers, growths, phimosis, paraphimosis, condylomata (venereal warts), cysts, lipomas or any masses, and areas of tenderness and swelling (as in epididymitis). If not already performed, a rectal examination is essential. If renal calculi are suspected, screen all urine for signs of "sandy grit," pus, and blood.

- Extremities—Compare upper extremities for symmetry, muscular development, deformity, evidence of nail biting, redness, warmth, tenderness, and crepitation. Examine the joints for range of motion, areas of tenderness, swelling, and discoloration. Inspect and palpate all lymph nodes in the upper extremities. Examine the legs for symmetry, edema, muscular development, abnormalities in blood vessels, and dermatological diseases. Apply passive and active range of motion techniques and check for tenderness, swelling, discoloration, and deformity in joints. Inspect and palpate all inguinal and femoral nodes. Examine the feet for changes in coloration or temperature—indicators of impaired circulation.

- Central Nervous System Checks—The following are the five testing categories in a neurological assessment:

  - Mental Status and Speech—Note the patient's dress, grooming and personal habits, expressions, manner, mood, speech, and level of consciousness.

  - Cranial Nerves—Test the olfactory and optic nerves by having the patient identify smells, testing visual acuity and mobility of the eyes, assessing the hearing, and observing for facial weakness or tics.

  - Muscles—Test for muscle tone, coordination, involuntary movements, and atrophy.

  - Sensory System—Test for sensations using pain, heat or cold, touch, and vibration.

  - Reflexes—Check deep tendon reflexes, superficial reflexes, and also check the pathological reflexes (i.e.g Brudzinski's sign and Kernig's sign). Reflexes are checked to localize nervous system disorders.

RADIOING FOR ADVICE

After taking the history and performing the physical examination, make an assessment of the patient's condition related to all positive findings. Independent duty hospital corpsmen usually have the most modern communications facilities at their disposal and should never have to guess. If you are in doubt as to the diagnosis, seek advice. Ship's information such as latitude, longitude, destination, and the like will be provided by the responsible section. Message format is likewise available from the communications section. Where to seek help is an administrative problem since the location of ships with medical officers aboard is not in the purview of the corpsman. However, you are responsible for the content of the message and should provide all essential information. Give the patient's full name, rate, SSN, age, mental state, and ship to which attached. List the principal complaint, nature and onset of symptoms, and also their duration. List the associated symptoms, and list personal and work habits that may have a bearing on the case. If injured, give the cause, location, amount of bleeding, deformity, and any other significant signs and symptoms. State the patient's vital signs and their trends, if any. List all other pertinent physical findings, results of tests, and any treatment started.

TREATMENT

ACUTE THORACIC EMERGENCIES

For acute thoracic emergenices:

- Establish and maintain an open airway.

- Keep the patient well oxygenated and, if necessary, use artificial respiration and intermittent positive pressure oxygen.

- Avoid using sedatives that depress the respiratory center.

- Counteract shock and maintain an adequate level of circulating blood volume.

DISEASES OF THE RESPIRATORY TRACT

The following are some of the more commonly encountered diseases of the respiratory tract.

Upper Respiratory Infection (URI)

In most cases, the signs and symptoms listed below indicate a severe URI and a need for medical assistance.

- An elevated temperature of 101°F or more that has persisted for 3 or more days.

- A white or dirty gray exudate in the throat.

- Diffuse reddening of the throat.

- A persistent cough of 2 or more weeks.

- Complicating symptoms that you should be alert for are skin rashes, stiff neck, muscular weakness, and swelling.

Pneumococcal Pneumonia

ETIOLOGY.—This is an acute inflammatory process in the alveolar spaces of the lung. Pneumococcus accounts for approximately 60% to 80% of all primary bacterial pneumonias. Because bacterial pneumonias are usually secondary to injury of the respiratory mucosa by viral infections such as influenza and the common cold, they often occur during periods of cold, inclement weather.

SYMPTOMS.—There is a sudden onset of symptoms with rapid progression. The condition of the patient deteriorates rapidly. Temperatures range from 100° to 105°F, pulse rate may go as high as 160, and respiration is marked by tachypnea (30 to 40 per minute). Respirations are shallow and a peculiar "grunt" may be heard upon expiration; the patient will often lie on the affected side in an effort to splint the chest. The patient experiences hard, shaking chills; sharp, stabbing chest pains that are exaggerated by respiration; and a productive cough with "rusty" colored sputum. Upon auscultation, fine inspiratory rales may be heard, followed by the classic signs of consolidation (absent breath sounds and dullness). Sometimes the abdomen becomes distended and a pleural friction rub may be heard.

TREATMENT.—General measures consist of complete bed rest and administering sufficient fluids to maintain a urinary output of at least 1500 ml daily. Penicillin G is the antibiotic of choice with usual doses of 600,000 units every 12 hours IM. Tetracycline and erythromycin are alternatives when a patient is hypersensitive to penicillin. Ventilation and oxygenation are of a distinct value. The patient should be fed a liquid diet initially, and when improvement occurs, a normal diet as tolerated.

Other Bacterial Pneumonias

Other primary bacterial pneumonias are caused by single bacterial species other than pneumococcus. To treat the pneumonia properly, the specific etiologic agent must be identified. Treatment is generally the same as for pneumococcal pneumonia except that a broad-spectrum antibiotic is used.

Aspiration Pneumonia

This is an especially severe pneumonia with a 60% mortality rate. It is caused by aspiration of the gastric contents and inhalation of hydrocarbons. Treatment is the same as for other pneumonias. Vigorous antibiotic therapy is essential.

Primary Atypical Pneumonia

This type of pneumonia is caused by a variety of viral and mycoplasmal agents. The symptoms include a gradually increasing fever with a history of URI; a nonproductive cough; hoarseness; headache and malaise; and extreme fatigue. The treatment is similar to other pneumonias.

Acute Bronchitis

Acute bronchitis is an inflammation of the bronchial tree caused by infections and physical and chemical agents. Bronchitis may appear as a primary disorder or as a prominent finding in many pulmonary diseases. The symptoms include dry, scratchy throat; hoarse, husky voice; fever; cough that produces mucopurulent sputum; and musical rhonchi and wheezing.

TREATMENT.—General measures consist of bed rest, forcing fluids to prevent dehydration, and discontinuing smoking. Using steam or mist inhalators is frequently beneficial in helping to relieve coughing. Severe coughing may be controlled with antitussives. Antihistamines should be administered to help relieve inflammation. Headaches, sore throats, and fever may be treated with aspirin. In patients with impaired respiratory or cardiac function, or in patients debilitated by other diseases, antibiotic therapy should be used to prevent secondary infections. One of the complications is pneumonia.

Chronic Bronchitis

Chronic bronchitis is marked by a normally nonproductive cough of long duration. If the cough is productive, the sputum is usually very thick. There are usually no other symptoms of URI.

TREATMENT.—As in the treatment for acute bronchitis, the patient with chronic bronchitis should be advised to discontinue smoking and to avoid other sources of lung irritation such as fumes. If the patient's cough is nonproductive, suppress it with antitussives. If it is productive, liquify it by adequate fluid intake, inhalation, and expectorants. Other treatment is as indicated for acute bronchitis.

Asthma

Asthma is a bronchial hypersensitivity disorder characterized by reversible airway obstruction. It is produced by the combination of mucosal edema, hypertrophy of the bronchial musculature, and excessive secretion of mucus, which causes mucosal plugs.

SYMPTOMS.—The patient experiences repeated attacks of wheezing, dyspnea, and coughing with mucoid sputum produced. Nocturnal coughing and wheezing on exertion is common. The patient usually has a history of frequent colds and displays nasal symptoms such as itching and congestion.

TREATMENT.—The first step is to eliminate the source of any known allergies. Maintain adequate rest and reassure the patient to relieve his or her apprehensions. Treat respiratory infections with antibiotics. Force fluids to prevent dehydration and help break up or liquify secretions. Epinephrine is the drug of choice, but may be replaced by aminophylline if not effective. Epinephrine should be administered cautiously in patients with angina or hypertension. Oxygen therapy is indicated in all cases of moderate to severe symptoms. Status asthmaticus is a continued, severe wheezing to a life-threatening point. The patient with this condition should be hospitalized immediately. Interim therapy is treatment aimed at preventing further attacks. The offending allergens should be identified and emotional disturbances eliminated, if possible. Drugs of choice in the interim therapy of asthma are the adrenal corticosteroids and corticotropin. Methylprednisone and IV hydrocortisone are the drugs normally used. A change in environmental conditions is indicated to prevent incapacitating or further complications.

Fibrinous Pleurisy

This condition is the result of deposits of fibrinous exudate on the pleural surface. It is usually secondary to pulmonary disease.

SYMPTOMS.—There is chest pain that is accentuated upon inspiration and minimal when the breath is held. The patient often lies on the affected side and respirations are decreased in motion and may be marked with a "grunt." A pleural friction rub is often present.

TREATMENT.—The treatment of the pleuritic pain is the only measure aimed at combating the fibrinous pleurisy. Other treatment is aimed at the underlying cause. Giving analgesics and strapping the chest to restrict movement is effective in treating the pain.

Pulmonary Abscess

This is a localized area of necrosis in the lung that may be putrid or nonputrid. Bronchial obstruction with subsequent infection distal to the block may be caused by aspirated vomitus, blood, pus, or mucus. It may also follow penetrating wounds of the chest. Putrid abscesses are usually single and caused by anaerobic bacteria. The right lung, especially the lower lobes, is most frequently affected. Nonputrid abscesses are usually hematogenous in origin and are usually multiple.

SYMPTOMS.—They include malaise, anorexia, cough, sweating, chills, and fever. The cough is at first nonproductive and later yields a foul, fetid sputum that is suggestive of abscess.

TREATMENT.—General measures consist of bed rest, postural drainage in the position of best drainage, and broad-spectrum antibiotic therapy. The patient may require evacuation for surgical resection, which is the treatment of choice when the risk is reasonable.

Spontaneous Pneumothorax

This condition results from air entering the pleural space, causing a partial to complete collapse of the underlying lung. It sometimes follows exertion or violent coughing.

Occasionally a valvelike effect is produced with progressive air leakage upon inspiration and failure of air exit upon expiration (tension pneumothorax).

SYMPTOMS.—Chest pain is referred to the shoulder and arm of the affected side. The pain is aggravated by inspiration and physical activity. Breath and voice sounds are diminished on the affected side; in large pneumothorax, there is a mediastinal shift to the opposite side. Percussion produces a hyperresonance.

TREATMENT.—If the degree of lung collapse is small, air leakage slight, and little discomfort produced, the lung may reexpand spontaneously. If the degree of collapse is greater, the leakage of air more pronounced, and the patient's discomfort great, insert a large-bore, short bevel needle into the anterior portion of the affected area. Insert it just into the pleural space to avoid trauma to the underlying lung. After tension is relieved, make a one-way valve from the finger of a rubber glove, slit at the end, and tied to the hub of the needle. As soon a possible, insert a Foley catheter into the pleural space and attach to a water trap (underwater seal) or a suction pump. Provide suction until the lung has been reexpanded for 24 hours. Treat severe pain with subcutaneous morphine. Treat for shock.

Traumatic Pneumothorax

A sucking chest wound results from lung puncture or laceration and is a surgical emergency. The wound must be made airtight by any available means and surgically closed as soon as possible.

Pulmonary Embolism

This condition results from a clot lodging in a pulmonary artery. The major causes are chronic cardiac disease, phlebitic or thrombosed veins of the lower extremities, postoperative complication (second or third week usually), and traumatic fractures (fat embolism).

SYMPTOMS.—By far the most common complaint is sudden onset of dyspnea. Pleuritic pain is common in moderate to severe embolisms. Hemoptysis, rales, pallor, foul breath, increased respirations, and shock may or may not result. In some cases of pulmonary embolism, a lung infarction with resulting abscess formation may occur.

TREATMENT.—Oxygen therapy in high concentration (preferably 100%) is essential to overcome anoxia. Administer meperidine for pain, treat for shock, and in moderate to severe cases, hospitalize as soon as possible.

Decompression Sickness

An acute illness in which nitrogen bubbles are forced into the bloodstream. It sometimes occurs in persons flying at high altitudes and following rapid reduction of air pressure in persons who have been breathing compressed air while diving.

SYMPTOMS.—This illness is characterized by joint pains, neurological symptoms, loss of consciousness, and sudden onset.

TREATMENT.—As soon as symptoms are reported, oxygen is given with the patient prone and the head slightly lowered. Refer immediately to the nearest recompression facility.

Pulmonary Edema

This is an acute medical emergency. It may be caused by drugs such as heroin, irritant gases, burns, or blast percussion causing injury to the alveolar-capillary membrane. However, it is usually the result of left ventricular failure or mitral stenosis.

SYMPTOMS.—Onset may be abrupt or insidious. Cough, asthmatic wheezing, dyspnea, and orthopnea (inability to breathe except in an upright position) occur in the early stages. Later, marked anxiety; gasping for breath; pink, frothy sputum; terror; anguish; profuse sweating; cyanosis; paroxysmal coughing; rales; thin, rapid pulse; and falling blood pressure occur.

TREATMENT.—Place patient in an upright position to relieve orthopnea. Morphine has long been the sovereign drug in the initial emergency treatment and many mild to moderate episodes have been relieved by morphine alone. Oxygen, intermittent positive pressure breathing, rapid venesection (to reduce circulating blood volume) or rotating tourniquets, and pulmonary drainage with maintenance of airway are used in severe progressive forms. Rapid digitalization is indicated once heart failure has been established and after it has been determined that the patient has not been completely or over digitalized. Digitalis intoxication may cause acute pulmonary edema.

DISEASES OF THE GASTROINTESTINAL (GI) TRACT

The following are some of the more commonly encountered diseases of the GI tract.

Diarrhea

Diarrhea may be caused by a wide variety of intestinal disorders such as viral enteritis, salmonellosis, or amebiasis, or it may be psychogenic in origin. It may also be caused by metabolic diseases, dietary factors, or food allergies.

TREATMENT.—Eliminate any specific causes. Place the patient on a liquid diet for the first 24 hours and then, if tolerated, a soft diet. Give antidiarrheal agents such as Kaopectate® or Lomotil®.

Pyrosis

Pyrosis (heartburn) is a burning substernal pain resulting from irritation of the distal esophagus.

TREATMENT.—Treatment normally consists of antacids and a bland diet. Elevating the head of the bed, weight reduction, avoiding tight clothing, and other symptomatic treatment have proven beneficial.

Constipation

Constipation is the result of lesions of the colon and rectum, hypometabolism, neurosis, improper fluid intake, and drug ingestion. Constipation should be considered only in patients who have been unable to move their bowels for several days or if the stools are very hard or dry.

TREATMENT.—The objective of treatment is to reestablish regular evacuation of feces. The diet is of primary concern. The patient should be instructed to maintain an adequate intake of food. Many times an inadequate food intake alone is sufficient to cause constipation. Foods consumed should have a high fiber content such as bran, raw fruits, and vegetables. Encourage the patient to force fluids, exercise, and take mild laxatives. Laxatives should be administered only until constipation is improved.

Nausea and Vomiting

Nausea and vomiting may be attributed to a wide variety of causes and may reflect underlying GI or systemic disease. Severe complications such as aspiration or esophageal rupture may result.

TREATMENT.—In treating simple acute nausea and vomiting, little or no treatment is required. In more severe cases, force fluids to prevent dehydration and give antispasmodic drugs such as Compazine® to combat nausea. Treat the underlying cause.

Psychologic GI Disorders

Abdominal pain may have many names, such as indigestion or dyspepsia, and may involve all or a portion of the GI tract. It is frequently caused by improper diet or irregular meals as well as poor living and hygiene habits.

SYMPTOMS.—The symptoms produced are varied. They include hyperirritability, altered motility and secretion of the GI tract, foul breath, cramps, diarrhea, and flatulence. Often there is a history of nervousness and emotional upset.

TREATMENT.—The patient should be instructed about personal and living habits and hygiene. Emphasize adequate and regular sleep, nourishing meals, and exercise. Treat symptomatically.

Upper GI Hemorrhage

This is rather a common medical emergency. It results from such conditions as peptic ulcer perforation, gastritis, and esophageal varices.

SYMPTOMS.—The patient may complain of weakness, fainting, or melena. Hematemesis is common. Shock may or may not be present. Loss of large amounts of blood volume produces hypovolemic shock.

TREATMENT.—General measures include absolute bed rest, recording intake and output, nasogastric suction, ice water or ice and antacid lavages, monitoring vital signs at least once per hour, replacing blood volume, and treating for shock. Keep the patient NPO for the first 24 hours. If the bleeding has subsided, start a liquid diet. Mild sedation may be indicated. For cases involving ulceration, antacid therapy should be begun as soon as bleeding and vomiting ceases. Hospitalize as soon as possible.

Hiatal Hernia

A hiatal hernia is caused by a portion of the stomach passing through the hiatus.

SYMPTOMS.—It is characterized by severe heartburn, burning and pain behind the sternum, and sensations of pressure. The pain may radiate down the arms or into the neck and jaw. Nocturnal regurgitation and dyspnea are common. Lying down tends to aggravate the symptoms, while sitting or standing relieves them.

TREATMENT.—They include weight reduction, antacids, and surgical correction of large hernias. Advise the patient to avoid tight or constricting clothing, especially belts or corsets. Further advise the patient to avoid lying down immediately after meals and to sleep with the head of the bed elevated.

Peptic Ulcer

This is an acute or chronic ulceration of the mucous membrane in the digestive tract that is accessible to gastric secretions. The oversecretion of gastric acids is an important factor in peptic ulcer formation. Psychic disturbances such as emotional tension are predisposing factors. Peptic ulcers are normally found in the first portion of the duodenum or on the lesser curvature of the stomach.

SYMPTOMS.—The patient may present a history of pain, heartburn, and abdominal distension. Nausea, vomiting, excess salivation, weight loss, and anorexia are common. The pain pattern is usually stable and is often relieved by food. Research indicates that food, no matter what type, even though it may relieve the pain, tends to aggravate the condition by causing gastric acid secretion.

TREATMENT.—Mental and physical rest is a basic requirement of ulcer treatment. The old regimen of frequent feedings of bland foods and milk is no longer an accepted practice. High dose antacid therapy is essential. Cimetidine, primarily in duodenal ulcers, blocks the secretion of gastric acids. Cimetidine is indicated during the acute stages of active ulcer disease but is not prescribed for long-term therapy. Diet should be as tolerated by the patient. The only real restrictions are coffee, tea, cola, chocolate, alcohol, and aspirin. The patient should be advised to avoid foods that tend to aggravate the condition. Complications to be alert for are GI bleeding or perforation. Either is cause for immediate hospitalization.

Acute Simple Gastritis

This is the most common of all stomach disturbances. It is an acute inflammation and erosion of the stomach mucosa. Chemical irritants, bacterial and viral infections, and sometimes allergies are causes. The onset is sometimes sudden and violent.

SYMPTOMS.—Malaise, anorexia, sensations of fullness and pressure in the epigastrium, diarrhea, colicky pain, and cramping are common. There may be fever, chills, headache, nausea, and vomiting.

TREATMENT.—Remove the offending agent if chemical or allergic in origin, and treat the specific bacterial or viral cause. Keep the patient NPO until the acute symptoms have subsided. Compazine® may be indicated for nausea and vomiting. Diet should be clear liquid initially and progressive as tolerated. Antacids may help relieve pain. Be alert for hematemesis, which may require hospitalization.

Regional Enteritis

This is a chronic inflammatory disease of the small intestine that is normally seen in young adults. The etiology is unknown.

SYMPTOMS.—Steady or colicky pain in the right lower quadrant (RLQ) of the abdomen or periumbilical area is common. There may be diarrhea with intervening periods of constipation or normal bowel function as well as fever, malaise, and anorexia.

TREATMENT.—Give a high caloric and high vitamin diet. Exclude all roughage, and during acute symptoms, exclude all milk products. Treat other symptoms symptomatically.

Appendicitis

Usually there is obstruction of the appendiceal lumen (usually by feces), followed by infection, edema, and frequently infarction of the appendiceal wall.

SYMPTOMS.—Epigastric or periumbilical pain that shifts to and localizes in the RLQ within 2 to 12 hours, with some early vomiting, is common. The pain is aggravated by coughing or movement. Localized abdominal findings are absent at the onset. Rebound tenderness and muscle rigidity and guarding are present and rectal tenderness is common. Temperature is slightly elevated and the WBC is elevated (10,000 to 12,000). Peristalsis may be diminished or absent.

TREATMENT.—The vermiform appendix must be removed by a surgeon. Until the patient is transferred for this purpose, place him or her on bed rest in the semi-Fowler's position, keep NPO, and place an ice pack on the abdomen. The primary complication to be alert for is perforation. The symptoms of perforation are a sudden increase in pain followed by temporary cessation, tenderness, generalized abdominal rigidity, WBC rise, and a rapidly rising fever. If transfer and surgery are delayed for any reason, IV therapy and nasogastric suction are indicated. The patient should be placed on a broad-spectrum antibiotic.

Inguinal Hernia

Inguinal hernias may be either congenital or acquired. It is a protrusion of a portion of the bowel through the external inguinal ring into the scrotal sac.

SYMPTOMS.—The complaint of a heavy, dragging sensation in the groin, especially with heavy exercise, straining, or coughing, is common. There is localized tenderness and the peritioneal sac may be palpable and visible. The mass may disappear when the patient is recumbent. Digital examination may show a large external inguinal ring. If the hernia becomes incarcerated (intestinal loop is pinched in the opening of the inguinal ring and the intestinal flow is obstructed), the patient will suffer pain, nausea, and vomiting. Strangulation (the intestinal loop becomes twisted or severely pinched and the blood supply is cut off) results in perforation and peritonitis.

TREATMENT.—For a reducible hernia, these measures include bed rest, Trendelenburg's position, and moist heat. For incarcerated and strangulated hernias, do not exert any pressure on the mass at any time. Opiates may be administered for pain. If perforation and peritonitis have resulted, administer IV and antibiotic therapy. Medically evacuate the patient as soon as possible for surgical care.

Nonspecific Ulcerative Colitis

This is an inflammatory disease of the colon of unknown etiology characterized by bloody diarrhea and prostration. Patient may experience 30 to 40 bowel movements per day. Abdominal cramping, anorexia, malaise, and fever are common.

TREATMENT.—General measures consist of bed rest, nutritious diet with no dairy products, mild sedation, and steroids.

Hemorrhoids

They are varices of the three hemorrhoid veins. Hemorrhoids are usually mild and remittent. The patient complains of pruritus, incontinence, recurrent protrusion, rectal bleeding, and sensation of discomfort and pain.

TREATMENT.—It consists of low roughage diet, regular bowel habits, sitz baths, suppositories, and surgical treatment if necessary.

Hepatitis

This condition is the result of an inflammation of the liver. There are two types of viral hepatitis: hepatitis A (infectious) and hepatitis B (serum). A third type of hepatitis is alcoholic hepatitis, which is induced only by alcoholic ingestion. Hepatitis A is usually transmitted by the fecal-oral route and occurs sporadically or in epidemics. Hepatitis B is transmitted by inoculations of infected blood in most cases but may be transmitted by the common use of razors, toothbrushes, and drug paraphernalia.

SYMPTOMS.—They include general malaise, myalgia, symptoms of URI, anorexia, distaste for smoking, nausea and vomiting, fever, dark urine, and enlarged tender liver. Jaundice may or may not be present.

TREATMENT.—Strict isolation is not necessary, but careful hand washing techniques are essential. Bed rest should be at the patient's option during the acute initial phase of the symptoms but is unwarranted thereafter. A gradual return to normal activity and a high protein diet is indicated.

Cholecystitis

This condition is an acute inflammation of the gallbladder, usually associated with gallstones (cholelithiasis). It occurs when calculus becomes impacted in the cystic duct and inflammation develops behind the obstruction.

SYMPTOMS.—Attacks are often precipitated by a large fatty meal. The appearance is sudden and pain may vary from minimal to severe. Pain is localized in the epigastrium or right hypochondrium but may be referred to the midscapular or intrascapular regions. The right upper quandrant is tender with muscle guarding and rebound tenderness. The gallbladder is palpable and jaundice may be present due to blockage of the common bile duct. There is usually some nausea, vomiting, and fever.

TREATMENT.—Treat with analgesics, IV therapy, and antibiotics as necessary, Diet should be as tolerated. With the above conservative regime, mild acute attacks will usually subside; however, reoccurrences are common and cholecystectomy may be necessary. Complications include perforation, peritonitis, and abscess. NOTE: Cholelithiasis requires surgery and is more common in women.

Pancreatitis

It is a severe abdominal disease for which causes have not been completely determined. About 40% of the cases are alcoholics; 40% have associated biliary tract disease, usually with gallstones; and the remaining 20% have a variety of causes.

SYMPTOMS.—Onset is sudden with steady, severe pain located in the epigastrium that may radiate from side to side in the lower back. The pain often worsens when the patient is in a supine position and is relieved by sitting and leaning forward. Nausea and vomiting as well as constipaton are common. Bowel sounds may be diminished, and the abdomen is usually distended. The upper abdomen is tender with muscle guarding and rebound tenderness. Fever, tachycardia, shock, pallor, profuse sweating with cool, clammy skin, and jaundice are common.

TREATMENT.—Give the patient nothing by mouth. Place on complete bed rest. Meperidine may be administered for pain. DO NOT give morphine. Place the patient on fluid and antibiotic therapy, and provide nasogastric suction.

DISEASES OF THE GENITOURINARY (GU) TRACT

The following are some of the more commonly encountered diseases of the GU tract.

Pyelonephritis

This acute, diffuse, often bilateral, pyogenic infection of the kidneys normally occurs via the ascending route but may result from hematogenous spread during bacteremia. It is sometimes precipitated by tumors or obstruction. Diabetes increase the likelihood of infection. Mixed infections are common after intrumentation or from fecal flora obtained from the skin of the peritoneum.

SYMPTOMS.—The symptoms may at times be absent or obscured by associated disease. The patient usually experiences chills, fever, flank pain, nausea, and vomiting. The patient may complain of urgency and frequency of urination, and the urine may contain pus or blood. Sometimes there is abdominal rigidity, or in the absence of rigidity, a tender enlarged kidney may be palpated. Costovertebral tenderness on the affected side is common.

TREATMENT.—Perform C&S and routine urinalysis. Before the specific pathogen is identified, start broad-spectrum antibiotic therapy. When the specific organism is identified, treat with appropriate drug. Force fluids to maintain urinary output of 2 to 3 liters per day. Treat symptomatically for pain.

Cystitis

This is a bladder infection resulting from pathogens entering the bladder via the ureter. Infection may result from trauma, stones, or inadequate emptying of the bladder.

SYMPTOMS.—Gross hematuria, frequency and urgency of urination, and in most cases, dysuria are common. A C&S often shows E. coli as the offending agent.

TREATMENT.—Perform routine urinalysis and C&S. Treat systemically with antibiotics.

Prostatitis

Prostatitis is an infection of the prostate gland. Bacteria often reach the gland via the bloodstream or the urethra. It is commonly associated with urethritis or active infection of the lower GU tract.

SYMPTOMS.—They include perineal pain, urethral discharge (copious amounts produced by palpation), fever, dysuria, and urgency and frequency of urination. Palpation of the prostate shows the gland to be enlarged, tender, and boggy. Chronic prostatitis may serve as a source of recurrent lower GU tract infection.

TREATMENT.—Acute prostatitis should be treated with sulfas, tetracycline, erythromycin, or ampicillin until C&S indicates the antibiotic of choice. Do not massage the prostate. Chronic prostatitis should be treated with long-term antimicrobial therapy. Follow up with weekly prostate massage to promote drainage.

Epididymitis

This inflammation of the epdidymis is caused by severe straining, catheterization, prostatitis, or instrumentation.

SYMPTOMS.—The disease is characterized by severe pain in the scrotum and rapid unilateral enlargement of the scrotum, with a marked tenderness over the spermatic cord that is relieved by lifting the testes. Pyuria, bacteriuria, and leukocytosis are usually present.

TREATMENT.—Essential treatment is supporting the scrotum with a scrotal bridge or pillow, sitz baths, rest, sedation, antibiotics, analgesics, and sometimes, infiltration of the spermatic cord with procaine hydrochloride.

Renal Calculi

Renal calculi are concentrations of mineral salts and crystals commonly called stones. Many theories and factors have been advanced as causes of calculi. Among these are excessive intake of milk (calcium), previous infection, sulfonamide therapy, metabolic disease, dehydration, or exposure to intensely hot climates. Also chronic pyelonephritis often predisposes to calculi.

SYMPTOMS.—Excruciating intermittent pain that originates in the flank or kidney area and radiates across the abdomen and along the course of the ureters is common. Frequently the pain radiates into the genitalia and along the inner aspects of the thighs. Chills, fever, and frequency and urgency of urination, despite pain, are common. Hematuria is usually present. Vomiting, diaphoresis, and shock may occur. Screening the urine may produce crystalline substances. Anuria indicates renal failure and leads to uremia.

TREATMENT.—Many solitary calculi, unaccompanied by obstruction or infection, require no specific therapy. Force fluids and restrict the intake of calcium. Antibiotics and Demerol® or morphine are indicated. Do not give antispasmodics. Bed rest and supportive treatment are indicated. Stones that are obstructive must be surgically removed. Hospitalize as soon as possible.

Uremia

Uremia is a toxic condition produced by renal failure and retention of waste products in the circulatory system.

SYMPTOMS.—At first, weakness, anorexia, nausea and vomiting, headache, vertigo, and dimness of vision may occur. Later there is extreme restlessness, insomnia, twitching, urinous odor to the breath, perspiration, waxy pallor, edema, coma, and convulsion.

TREATMENT.—Fluid replacement to equal the amount of urinary output plus the amount of insensible fluid loss should be effected. Specific therapy is aimed at treating the underlying cause such as congestive heart failure, infection, or obstruction. Hospitalize immediately.

Testicular Torsion

This condition is the result of twisting the testes. It may occur spontaneously as the result of emotional stress or as the result of strenous activity or exercise.

SYMPTOMS.—There is a sudden onset of intense pain, and the pain is aggravated by elevating the scrotum. This is the essential diagnostic difference between testicular torsion and epididymitis. The twisted testicle is normally higher and closer to the external ring. The patient demonstrates nausea, vomiting, pallor, and syncope. The color of the scrotum on the affected side is pink and swelling is rapid.

TREATMENT.—This is an emergency! Immediate surgical correction is essential to avoid gangrene due to vascular occlusion. Administer meperidine or morphine for intense pain.

Genitourinary Trauma

This condition is normally caused by penetrating and perforating wounds, blunt crushing injuries, surgery, or irradiation. The kidney is most often injured by blunt external force to the flank or abdomen. Rupture of the bladder occurs when the bladder is over distended and external force is applied. Injuries to the urethra are caused by pelvic fractures. Crushing or avulsion is the main cause of injury to the genitalia.

TREATMENT.—In all cases of serious GU trauma, the patient should be hospitalized as soon as possible, since in most cases, surgical correction will normally be required. In all injuries, gangrene and tetanus are serious possibilities. In case of avulsions, retain the avulsed tissue and refrigerate it immediately. Treat for shock, give analgesics, and force fluids.

DISEASES OF THE CIRCULATORY SYSTEM

Rheumatic Fever

This acute, infectious, noncontagious systemic disease is most commonly found in children and young adults. It is most often a result of hemolytic streptococcal infection and is the most common precursor to heart disease in people under 50. Repeated attacks lead to chronic rheumatic heart disease that may cause mitral or aortic stenosis or insufficiency.

SYMPTOMS.—Normally there is a history of URI within the last 3 weeks. Fever, tachycardia, rapid respirations, joint pain, and swelling are common. The sedimentation rate is markedly increased and the patient may suffer frequent epistaxis. There may be precordial or abdominal pain, malaise, anorexia, chorea (involuntary muscle tics or jerking), and diaphoresis.

TREATMENT.—General measures consist of bed rest, aspirin, high caloric soft diet, and support and protection for the affected joints. Use penicillin to combat existing infections. Order bed rest until the acute stages of the disease have passed. Return to full activity may take months.

Angina Pectoris

It is a characteristic, usually substernal, thoracic pain caused by a mild coronary insufficiency (normally arteriosclerotic heart disease) and is precipitated by exertion. Attacks are frequently experienced when mounting inclines or stairways. Angina always occurs during exertion and subsides promptly if the patient stands or sits quietly. The patient will usually prefer to stand or sit rather than to lie down.

SYMPTOMS.—Chest pain is the chief complaint. Usually it is located behind or slightly to the left of the sternum and frequently radiates to the left shoulder and arm. Occasionally the pain may be located at the base of the neck, lower jaw, axilla, or epigastrium. Rarely is it referred to the right side of the body. The pain is usually described as squeezing, crushing, or viselike as opposed to sharp or stabbing. The intensity varies from mild to severe and may be incapacitating. Episodes normally last from 1 to 3 minutes. The patient may experience palpation, faintness, sweating, dyspnea, and digestive disturbances.

TREATMENT.—Rest! Nitroglycerine is the drug of choice. Amyl nitrite is sometimes used.

Atherosclerosis (Hardening of the Arteries)

This is the most serious form of arteriosclerosis because of its tendency to affect coronary, cerebral, and peripheral arteries.

TREATMENT.—Because of its insidious nature, the best treatment is prevention. Techniques of prevention and management include treating the underlying cause, weight reduction, exercise, discontinuance of smoking habits, and reducing the fat and cholesterol intake.

Myocardial Infarction (MI)

Damage to a portion of the heart muscle is caused by myocardial ischemia. It is most often caused by blockage of one or more of the branches of the coronary arteries.

SYMPTOMS.—This disease may be preceded by a history of angina, and the symptoms may begin at any time. The major complaint is severe squeezing or crushing substernal pain. The location of the pain is similar to angina but is markedly more persistent. It does not subside with rest. Dyspnea, severe anxiety, and shock are common.

TREATMENT.—The primary objective of treatment is to minimize heart damage and sustain life. If the MI causes cardiac/pulmonary arrest, CPR is of primary importance. The patient should be administered Demerol or morphine for pain and to help relieve apprehension. Oxygen therapy is essential and sedation is appropriate. In all cases, transfer the patient to the cardiac care unit (CCU) as soon as possible.

Congestive Heart Failure

This condition is due to the failure of the heart to maintain an adequate flow of blood to the tissues. The pulmonary or systemic circulation becomes congested, often resulting in left ventricular failure.

SYMPTOMS.—The patient's chief complaint is dyspnea and often a gradual loss of energy. The ankles are often swollen and markedly edematous. The blood pressure may or may not be increased.

TREATMENT.—General measures consist of absolute bed rest and sedatives or analgesics as necessary. The patient should avoid stress and should reduce sodium intake. Weight reduction is indicated in overweight individuals. Start oxygen therapy and request further treatment orders from a physician. Transfer the patient for hospitalization as soon as possible.

Hypertension

It is blood pressure elevations above the normal range that are caused by abnormal resistance of the arterioles to the flow of blood.

SYMPTOMS.—High blood pressure readings, headaches, vertigo, fatigue, and weakness are common. The patient may exhibit insomnia, nervousness, palpation, epistaxis, and tachycardia.

TREATMENT.—It consists of rest, both mental and physical, a low sodium diet, and weight reduction. Refer the patient for evaluation and definitive treatment.

Thrombophlebitis

It is characterized by partial or complete obstruction of the vein with resulting inflammation of the venous walls. It is most frequently found in the deep veins of the lower extremities. Thrombophlebitis occurs spontaneously in pregnancy or in the postpartum period. It also occurs between the 4th- and 14th-postoperative day and as a result of trauma or IV therapy.

SYMPTOMS.—The primary symptoms are pain and swelling in the involved extremity. The superficial veins may become dilated and the affected extremity is usually warmer at the site than the remainder of the skin. The pedal pulse is diminished in most cases and the patient may complain of a sensation of heaviness in the affected limb. Calves are painful upon dorsiflexion of the foot, and there is usually plantar tenderness.

TREATMENT.—General measures consist of moist heat wraps applied to the affected site, strict bed rest with elevation of the affected limb, and Butazolidin®. Anticoagulant therapy is sometimes unnecessary with superficial thrombophlebitis but is considered definitive in cases involving the deep veins. Elastic bandages are applied to the limb to lend support to the veins. Complications to be alert for are pulmonary embolisms, and in rare circumstances, emboli in other vital organs.

Varicose Veins

Varicose veins are abnormally lengthened, dilated, sacculated, superficial vessels normally found in the lower extremities. These may be asymptomatic. They are caused by incompetence of venous valves, increased distensibility, and in some cases may be an inherited trait. Contributing factors are prolonged standing, pregnancy, obesity, and aging.

SYMPTOMS.—They include muscle cramps, tired muscles, and calf muscle soreness. The ankles tend to swell, with spontaneous remission of swelling overnight. An itchy, scaling dermatitis in the region of the affected vein is common. Veins are abnormally visible and palpable, and ulceration may occur.

TREATMENT.—Elastic stockings, and support and elevation of the extremity are definitive. The patient should be instructed to avoid prolonged standing. Surgical correction is often necessary in severe cases.

Septicemia

Septicemia is the presence of bacteria in the circulating blood and is frequently caused by surgery, IV therapy, or indwelling catheters.

SYMPTOMS.—Fever, chills, skin eruptions, and shock are common.

TREATMENT.—Evacuate the patient to a medical facility immediately.

Hodgkins's Disease

The cause of this disease remains unknown. It is a chronic, progressive, and often fatal disease manifested by progressive enlargement of the lymph nodes, spleen, liver, lungs, and frequently other organs and tissues.

SYMPTOMS.—Normally the initial stages are marked by painless enlargement of the superficial lymph nodes as well as persistent pruritus, fever, and diaphoresis.

TREATMENT.—Evacuate the patient to a medical facility for evaluation.

Lymphadenitis and Lymphangitis

Lymphadenitis is the inflammation of a lymph node. Lymphangitis is the inflammation of a lymph vessel. The cause is bacterial infection arising from the site of an infected wound or an area of cellulitis.

SYMPTOMS.—Throbbing pain, malaise, anorexia, sweating, chills, and fever are common. There may be a red streak running from the wound site toward the lymph nodes.

TREATMENT.—General measures consist of rest and immobilization of the affected part. Moist heat and systemic antibiotic therapy are indicated. I&D may be necessitated by an abscessed node.

Anemia

This is a condition in which red blood cells are deficient in volume in the circulating blood or in total hemoglobin content per unit of blood. It may be caused by excessive blood loss, deficient RBC production, RBC destruction, or iron deficiency.

SYMPTOMS.—They include fatigue, dyspnea, palpation, waxy pallor, low hemoglobin, angina, and tachycardia.

TREATMENT.—Rest, whole blood, supplemental iron, and replacement of dietary deficiencies are the recommended treatment measures.

Leukemia

It is a disorder of the blood forming tissue that is characterized by proliferation of abnormal white blood cells.

SYMPTOMS.—Malaise, anorexia, fever, arthralgia, lymph node swelling, sternal tenderness, and excessive bleeding are common.

TREATMENT.—Evacuate the patient to a medical facility.

PROBLEMS OF THE MUSCULOSKELETAL SYSTEM

Fractures, dislocations, sprains, and strains are by far the most common ailments of the musculoskeletal system. As these are covered in the *HM 3 & 2* Rate Training Manual, they will not be addressed here. However, common inflammantory conditions are often presented at sick call: the following are some of the more commonly encountered.

Costochondritis (Tietze's Syndrome)

This is an inflammatory condition of the costal cartilages of unknown cause.

SYMPTOMS.—It is characterized by pain, tenderness, and sometimes swelling of one or more of the costal cartilages. The pain is accentuated by breathing, coughing, and movement. It may be mistaken for cardiovascular disease by the patient. Palpation may localize the pain to the point of inflammation.

TREATMENT.—Administer analgesics for pain. In more severe episodes, it may be necessary to inject the site of inflammation with a mixture of lidocaine and steroids. This condition is often persistent and may last for weeks.

Bursitis

This is an acute or chronic inflammation of a bursa that may be the result of trauma, gout, infection, or rheumatoid arthritis.

SYMPTOMS.—Pain, swelling, and limitation of movement in the area involving the affected bursa are common. There may be effusion into the bursal sac.

TREATMENT.—General measures consist of complete rest of the affected area until there is relief of acute symptoms. Administer analgesics and encourage active movement as soon as the pain subsides. Heat and massaging may help. Hydrocortisone injections provide relief in most cases not caused by a specific infection.

Tendinitis/Tenosynovitis

Tendinitis is the inflammation of the flexor tendons or tendon-muscle attachments; tenosynovitis is an inflammation of the synovial sheath surrounding the tendon. Either condition may be the result of trauma, and it is manifested by pain and swelling in the inflamed area.

TREATMENT.—Immobilize the area and apply moist heat. Administer analgesics for pain. Anti-inflammatory drugs are indicated. Chronic cases should be referred for more definitive therapy.

Arthritis

This is an inflammatory process of the joints that can be broken down into the following categories. These specific types are the most commonly encountered.

- Rheumatoid—A progressive and debilitating inflammation of one or more joints (usually multiple) that affects women more often than men. The onset may be abrupt or gradual, and although more commonly found in the proximal interphalangeal joints, it may occur in any joint. The primary symptoms are pain and swelling in affected joints with stiffness upon arising from sleep. Afternoon fatigue and thickening of the synovial sheath are common, and there may or may not be some deformity.

- Rheumatic—A self-limiting inflammation of the large hinge joints (usually singular) that is most often preceded by a history of streptococcal infection.

- Degenerative—Osteoarthritis results from the destruction of the hyaline cartilage. The specific cause is unknown; however, trauma, obesity, and age are predisposing factors. Degenerative arthritis most often occurs at middle age and older and is more common in women than men. The spine and stress joints are most often affected. Muscle spasms, pain, swelling, and deformity are associated symptoms.

TREATMENT.—The treatment consists of rest (complete bed rest in severe episodes), proper diet, analgesics, and anti-inflammatory drugs. Aspirin, for those who can tolerate it, is the drug of choice since it possesses both analgesic and anti-inflammatory properties and is relatively safe. Moist heat, reduction of weight (specifically in degenerative arthritis when weight bearing joints are affected), and corticosteroid injections may be indicated. Evacuate the patient for evaluation.

Gouty Arthritis

This is a form of arthritis primarily affecting the great toe, ankles, and thumbs. It is caused by collections of urate crystals in the tissues and may be chronic.

SYMPTOMS.—Deformities, redness, pain, and swelling of tissues around the joints are common. Often this disease resembles cellulitis.

TREATMENT.—Indocin® is indicated for acute attacks. Corticosteroids are contraindicated. Recurrent attacks may be prevented by using Zyloprim®. Moist heat and analgesics are indicated for symptomatic treatment.

Gonococcal Arthritis

This acute arthritis results from systemic infection with gonococcus. It usually occurs in the large hing joints.

SYMPTOMS.—Redness, swelling, severe pain, fever, and limitation of and markedly increased pain upon movement are common.

TREATMENT.—Treatment is aimed at preventing destruction of the affected joints. This destruction occurs in a relatively short period. Penicillin or other antibiotic therapy is definitive. Other treatment is symptomatic.

In all cases of severe or chronic arthritis, refer the patient to a rheumatologist for further evaluation.

DISORDERS OF THE EAR, NOSE, AND THROAT

The following are some of the more common disorders of the ear, nose, and throat that you will encounter when conducting sick call.

Conditions of the Ear

Hearing Loss

Loss of hearing may result from trauma, tumors, infections, impacted cerumen, excessive noise, or as a result of a degenerative nerve process.

SYMPTOMS.—Tinnitus, decreased hearing ability, and in some cases, pain are common.

TREATMENT.—If the loss is the result of excessive noise, a change of working or living environment is indicated. Sound suppressors and hearing protection devices should be employed. If the loss is due to an underlying cause such as impacted cerumen or infection, treat the cause.

Perforated Tympanic Membrane

Although this condition may occur spontaneously, it is normally a result of trauma.

SYMPTOMS.—There may be pain, discharge, hearing loss, and a blowing sensation in the ear.

TREATMENT.—If the perforation is small, no treatment is necessary. Unless the perforation is due to infection, do not instill medications in the ear. A light cotton pledget may be used to prevent dirt or water from entering the ear. For more serious perforations, refer the patient for treatment.

Acute External Otitis (Swimmer's Ear)

This is an acute infection in the ear canal, which sometimes involves the auricle and often occurs after swimming.

SYMPTOMS.—There is usually severe pain and enlarged lymph nodes, and there may be a discharge. Fever is normally present.

TREATMENT.—Place a wick in the ear canal for 48 hours. The wick should be moistened with aluminum acetate solution every 3 hours. Following this, instill topical antibiotics and steroids. Treat other symptoms symptomatically.

Aural Furunculosis

This condition is the result of a furuncle involving the auricle and external ear canal.

SYMPTOMS.—Impaired hearing, feelings of fullness in the ear, swelling, pain, fever, redness, and lymphadenopathy are common.

TREATMENT.—Furuncles on the auricle should be treated in the same manner as furuncles elsewhere on the body (see Common Dermatological Conditions in this chapter). When the furuncle is in the external canal, insert a wick moistened with aluminum acetate solution into the ear canal. Application of heat packs may help to bring the infection to a point. I&D after fluctuation. Administer systemic antibiotics.

Otomycosis

This is a fungous infection of the external ear resulting from poor hygiene, swimming, and favored by warm, moist climates.

SYMPTOMS.—These include itching, pain, a possible discharge, a stinging sensation, and the appearance of "salt and pepper" particles (i.e., dirty gray or black exudate resulting from prolonged scratching).

TREATMENT.—Remove debris with a solution of acetic acid and aluminum acetate. Dry the ear with alcohol, and perform a smear to identify specific fungus. Treat with the appropriate topical antifungal agent.

Acute Otitis Media

This is an infection of the middle ear that is usually the result of bacterial origin. It normally follows URI and is more common in children.

SYMPTOMS.—It is characterized by pain, deafness, fever, chills, and sensations of fullness or pressure. The tympanic membrane is red and bulging and rupture is common. Visualization of normal landmarks is impeded and often impossible due to swelling. Hearing tests show a conductive loss.

TREATMENT.—Administer decongestants to help promote drainage. Bed rest and analgesics are indicated. Start systemic antibiotic therapy and maintain it until the eardrum appears normal and other symptoms subside.

Labyrinthine Disease

This is a suppurative inflammation of the inner ear that may be caused by chronic otitis media, allergies, trauma, blood dyscrasias, and cardiovascular disease.

SYMPTOMS.—These include deafness, tinnitus, vertigo, nystagmus, nausea, vomiting, a staggering gait, and a tendency to fall toward the affected side.

TREATMENT.—Transfer the patient to a medical facility for definitive treatment as soon as possible. Treat symptomatically until you make the transfer.

Tinnitus

Tinnitus is a noise or "ringing" in the ears which, although bearable during the day, is more disturbing at night. The cause may be infection, toxic doses of medications, or vascular and/or vasomotor disease.

TREATMENT.—Reassure the patient. Difficult or severe cases should be referred to a medical facility for treatment of the underlying cause.

Foreign Bodies

Foreign bodies in the ear are normally inanimate objects, such as erasers, buttons, peas, and beans. These are normally introduced by the patient in an attempt to scratch the ear or to remove cerumen or by children. Animate objects, such as ticks and moths, may crawl into the ear canal.

SYMPTOMS.—There is usually pain, fullness, loss of hearing, and visualization of the foreign body.

TREATMENT.—The nature of the foreign body must first be determined. If the object is animate, hold a bright light to the ear. Since insects are attracted to light, this may induce the insect to crawl out. If this fails, instill a few drops of kerosene or alcohol into the ear to kill the insect, and irrigate to remove it. For hygroscopic bodies such as peas and beans, DO NOT use water, saline, or boric acid as these liquids will cause the object to swell and become wedged in the ear canal. Use a fine wire ear curette or irrigate with alcohol or light oil to remove the object. If the object is sharp or pointed, be very careful to prevent further injury. If necessary, transfer the patient to a medical facility for removal.

Conditions of the Nose

Common Respiratory Disease

The common cold is the best example of this type of ailment.

SYMPTOMS.—They include malaise, little or no fever, headache, chills, nasal discharge, red nares, and sneezing.

TREATMENT.—There is no specific treatment. Advise the patient to get rest, plenty of fluids, and a well-balance diet. Treat symptomatically.

Epistaxis

The most common sites of nasal bleeding are the mucosal vessels located over the cartilaginous nasal septum and the anterior tip of the inferior turbinate. The cause is normally trauma, infection, and drying of the nasal mucosa.

TREATMENT.—An adequate physical examination to determine the scope and location of bleeding is essential. Applying pressure over the nose (pinching) will stop most bleeding. A small pledget of cotton moistened with hydrogen peroxide, phenylephrine, or epinephrine may be effective in stopping the bleeding. Severe posterior epistaxis may require a nasal pack.

Allergic Rhinitis

This is a reaction caused by sensitization to an allergen, which is usually pollen.

SYMPTOMS.—It is characterized by nasal congestion, a watery discharge, itching of the nasal mucosa and conjunctiva, and violent sneezing.

TREATMENT.—Antihistamines and sympathomimetic drugs such as ephedrine may be indicated. Steroids are sometimes effective. Have the patient avoid specific allergens if possible.

Conditions of the Pharynx

Acute Tonsillitis

This a bacterial infection of the tonsils that may be either foodborne or airborne.

SYMPTOMS.—It is characterized by sudden onset of anorexia; malaise; fever; sore throat; red, swollen tonsils; presence of pustules on the tonsils; difficulty in swallowing; and swelling and tenderness in the cervical lymph nodes.

TREATMENT.—General measures consist of bed rest, forcing fluids, and placing the patient on a light diet. Administer analgesics and antibiotics as required. Gargles may prove beneficial. Acute tonsillitis may reoccur and become chronic. Chronic cases should be referred for possible surgical excision.

Peritonsillar Abscess

This is an acute suppuration that is often seen as a sequela of acute tonsillitis. It is usually unilateral and most often occurs in the deep peritonsillar space.

SYMPTOMS.—Swelling of the soft palate, severe sore throat, and displacement of the uvula are common. There may be pain upon opening the jaw, swelling and pain at the site of the cervical lymph nodes, and fevers of up to 105°F.

TREATMENT.—General measure consist of systemic antibiotics, bed rest, forcing fluids, and administering analgesics to control temperature and pain. Transfer the patient to a medical treatment facility for I&D of the abscess and subsequent tonsillectomy.

Acute Laryngitis

This is an inflammation of the laryngeal mucosa due to virus or bacteria. It may occur as a primary disorder or in association with rhinitis and pharyngitis.

SYMPTOMS.—They include pain, cough, redness, edema, a rasping quality to the voice, fever, malaise, and if severe edema is present, dyspnea, and dysphonia and aphonia (difficulty in speaking or inability to speak).

TREATMENT.—General measures include voice rest; discontinuing smoking; inhaling warm, moist air; and symptomatic treatment.

DISORDERS OF THE OCULAR SYSTEM

There are many nonspecific manifestations of disorder in the ocular system as well as pain, blurred vision, discharge, spots, and headache. All of these symptoms require further investigation.

Acute Glaucoma

This is a condition of the eye that is characterized by increased intraocular pressure. The pressure, if unchecked, causes atrophy of the optic nerve. This is an extreme surgical emergency! If unchecked for 2 to 5 days, the condition will most likely result in complete and irreversible blindness.

SYMPTOMS.—Patients with acute glaucoma will seek treatment immediately because of severe pain and blurring vision. The eye will appear red and the cornea has a steamy look. The pupil will be dilated and will not react to light. Intraocular pressure is elevated (over 25 mm Hg).

TREATMENT.—Transfer the patient to a medical facility immediately.

Ocular Foreign Bodies

Foreign bodies in the eye are a serious threat in many instances to the patient's sight. See the *HM 3 & 2* Rate Training Manual for further information.

Corneal Abrasions

Corneal abrasions are usually the result of foreign bodies striking the cornea.

SYMPTOMS.—There is usually pain upon movement of the lid and a history of trauma.

TREATMENT.—Rule out a foreign body. Instill sterile fluoroscein into the conjunctival sac if an abrasion is suspected. The abrasion will stain green while the surrounding cornea will appear orange. Instill polymyxin-bacitracin ophthalmic ointment and apply a firm bandage. Check the eye the following day for healing.

Contusions (Black Eye)

Contusions are usually the result of subconjunctival hemorrhage, corneal rupture, or vitreous or retinal hemorrhage. They are almost always accompanied by a history of trauma.

Some of the symptoms are immediately apparent, others may not become apparent for days. Hyphema (hemorrhage into the anterior chamber of the eye), retinal detachment, and optic nerve injury are all complications that should be suspected.

TREATMENT.—Moderate and severe contusions should be referred to an ophthalmologist. Any injury causing hyphema involves the danger of secondary hemorrhage that may result in irreversible glaucoma. Patients with hyphema should be placed on bed rest for 6 to 7 days with both eyes bandaged.

Lacerations

Lacerations involving the lid margins should be referred to an ophthalmologist. Lacerations involving the conjunctiva need not be sutured. Instill antibiotics to prevent infection. Corneal or scleral lacerations should be lightly bandaged and covered with a metal shield. Instruct the patient to avoid squeezing his or her eyes together and to remain quiet. Pressure exerted may result in extrusion of the intraocular contents. In all lacerations involving the eye, transfer the patient to an ophthalmologist.

Conjunctivitis

This is an inflammation of the thin mucous membrane lining the inner portions of the eyelids and anterior surface of the eyeballs. The inflammation may be acute or chronic and can be due to chemical irritation, allergy, bacterial or viral infection, and fungal or parasitic infection.

- Bacterial Conjunctivitis—It produces a purulent discharge, photophobia, and reddening of the eyelids and conjunctiva. The eyelids may burn, itch, or smart, and often there is marked edema. The discharge repeatedly turns mucopurulent and may seal the eyelids at night. The condition usually lasts about 10 days.

TREATMENT.—There is no specific treatment, but sulfonamide therapy helps prevent secondary infection.

- Viral Conjunctivitis—Blennorrhea is also called inclusion conjunctivitis. It is a venereal infection resulting from nongonorrheal cervicitis and urethritis that can be spread to the eyes during and after intercourse. In the past, this form was also spread during swimming and was known as swimming pool conjunctivitis. Adequate chlorination of swimming pools has eliminated this mode of transporation.

SYMPTOMS.—There is usually a copious watery discharge with scanty exudate, occasional fever, and malaise as well as lacrimation, photophobia, sensations of sand or grit in the eye, and burning in the eyelid margins.

TREATMENT.—Isolation techniques, such as separate towels, are advisable. Treat with sulfonamides or tetracyclines systemically for 3 weeks. Instill tetracycline drops in oil to supplement the systemic tetracycline.

- Allergic Conjunctivitis—This is commonly and most frequently associated with hay fever.

SYMPTOMS.—There is usually tearing, itching, redness, and a thin stringy discharge.

TREATMENT.—Corticosteroid therapy is usually effective.

Hordeolum

A sty is a common abscess formation at the eyelid margin due to staphylococcus.

SYMPTOMS.—There is usually pain, redness, swelling, and an area of tenderness on the upper or lower eyelid. The intensity of the pain is related to the amount of swelling. The abscess tends to localize within a few days. The patient sometimes complains of photophobia, lacrimation, and a feeling of fullness or "foreign body" sensation.

TREATMENT.—Apply warm compresses. When the abscess focuses to a point, it will normally rupture spontaneously. An I&D may be performed if necessary. Irrigate the eye with warm saline and apply local antibiotics or sulfonamides.

Dendritic Ulcer

This is a superficial corneal ulcer caused by the herpes simplex virus. It is almost always unilateral and may affect any age group. It is characterized by superficial branching gray lesions of the cornea, resembling the veins in a leaf.

TREATMENT.—Transfer the patient to an ophthalmolgist as soon as possible for removal of the ulcers.

Iritis

This is an acute inflammation of the iris. When the ciliary body is involved, as it usually is, the condition is known as iridocyclitis.

SYMPTOMS.—It is characterized by a severe throbbing pain that radiates to the forehead and temple, lacrimation, photophobia, blurring of vision, redness, and enlarged blood vessels around the cornea.

TREATMENT.—General measures consist of bed rest with subdued light, local corticosteroid therapy, and warm compresses. Transfer the patient as soon as possible to an ophthalmolgist.

Retinal Detachment

There is usually partial or complete separation of the retina from its pigment layer.

SYMPTOMS.—The patient may notice flashes of light or stars, followed by the sensation of a curtain moving over the eyes.

TREATMENT.—Immobilize in bed and instill mydriatics to dilate the pupils. Evacuate the patient as soon as possible to an ophthalmologist.

Floaters

A sensation (accentuated in bright light) of seeing spots is a common complaint in myopic and elderly patients.

SYMPTOMS.—The spots are normally seen when looking at the sky and cannot be focused upon. Brown or red spots that are reasonably stable often indicate minute hemorrhage. A large, slow moving spot is normally an intraocular foreign body.

TREATMENT.—Refer for routine eye examination.

COMMON DERMATOLOGICAL CONDITIONS

Contact Dermatitis

This is an acute or chronic inflammation produced by substances coming into contact with the skin. Some of the more common skin sensitizing agents are poison ivy, poison oak, fruits, vegetables, chemicals, therapeutic agents, cosmetics, fabrics, and detergents.

SYMPTOMS.—The most common sites are the face, neck, hands, feet, eyelids, and genitals. The scalp is not usually affected; however, any area of the body may be affected. In many instances, the site of the dermatosis is a clue as to the agent involved. The patient's major complaints will normally be itching, scaling, rash, and pain.

TREATMENT.—No treatment can be effective until the causative agent is determined and eliminated. In acute stages, bland compresses and a drying corticosteroid lotion may be indicated. If the dermatitis is extremely uncomfortable or disabling, a short course of systemic corticosteroid therapy may be effective. Antihistamines are of little or no value in contact dermatitis. If crusting and scaling occur, substitute bland greases and creams for compresses and drying agents.

Atopic Dermatitis

Atopic dermatitis is a chronic, itching, superficial inflammation of the skin, normally associated with a family history of allergic disorders. Usually no single causative agent can be located. Patients with atopic dermatitis tend to be tense and restless; however, the relationship between the dermatitis and the psychic state is unknown.

SYMPTOMS.—The skin is dry and the primary compaint is itching. There are seldom any vesicles although scratching and rubbing may produce excoriation. The face, neck, antecubital and popliteal spaces, hands, and wrist areas are most often involved. Scratching by the patient may produce a secondary infection with oozing and crusting. Many times the condition is persistent and tends to be localized in one specific area.

TREATMENT.—Topical corticosteroids are the most effective agents and should be applied in small amounts and rubbed in thoroughly. If the episode is severe, oral corticosteroids are indicated for a short period. Advise the patient to keep the skin as free as possible from perspiration and to avoid scratching. The skin should be kept moist by using oils or lotions. Antihistamines often prove very effective in relieving itching. Advise the patient to avoid wool clothing or 100% synthetic fibers.

Psoriasis

This is an acute or chronic paposquamous skin disease of unknown etiology. In approximately one-third of all cases, the cause is hereditary. Psoriasis is found in two-thirds of all adult white males but is rarely found in blacks.

SYMPTOMS.—It is clearly defined erythematous papules covered with shiny or opalescent scales. The patient may complain of itching. The lesions are usually self-healing and heal without scarring. The scalp, extensor surface of extremities, back and buttocks, and the nails are the most common sites. A secondary bacterial infection may occur.

TREATMENT.—There is no known cure for psoriasis. The existing treatments may produce temporary relief. Corticosteroid cream is the most widely acclaimed of the various treatments and should be applied at bedtime. Cover the lesions with polyethylene strips during the night. In the morning scrub the lesions thoroughly with a soft brush to remove scales. Repeat the treatment until the symptoms are relieved. Refer the patient to a dermatologist for routine evaluation. There are other treatments that may prove effective in treating psoriasis. Request advice on them from a dermatologist.

Acne

Acne is probably the most commonly encountered dermatitis. It is an inflammatory disease occurring in areas where sebaceous glands are the largest, most numerous, and most active. Human sebum is a tissue irritant. Overfilling of the sebaceous glands or squeezing by the patient causes this irritant to escape into the surrounding tissues and develop a papule. A secondary bacterial infection occurs, leading to pustule or cyst formation. These formations may lead to pitting and scarring.

TREATMENT.—The initial treatment of acne should include advice to the patient to avoid contributing foods such as chocolate, nuts, and colas. Vitamin A supplements are sometimes given for 3-month periods, with a 1-month interruption to avoid hypervitaminosis. Instruct the patient to thoroughly wash twice daily with an antibacterial, abrasive soap. A drying lotion may be used. A broad-spectrum antibiotic administered systemically may be given during episodes of severe acne. Tetracycline is the most widely used of these drugs.

Seborrheic Dermatitis

This is an acute or chronic scaly inflammation of the skin that usually affects the scalp, face, presternal and interscapular areas, and body folds. It occurs in persons with oily skin. Also, hereditary factors appear to play a part in this condition.

SYMPTOMS.—These include scaling that may be greasy or dry and sometimes pruritic. Redness, fissuring, and infection may be secondary.

TREATMENT.—A well-balanced diet with the reduction of sweets is indicated. Steroid creams and lotions are often beneficial, and the patient should be advised to wash with an antiseborrheic cleanser such as Fostex®.

Urticaria (Hives)

This is an acute or chronic allergic inflammatory skin reaction. It is normally the result of ingesting certain foods or drugs (commonly shellfish, eggs, milk, and penicillin).

SYMPTOMS.—Raised wheals may occur over any or all of the body and itch intolerably. The patient may run a mild fever and experience general malaise. Swelling may cause laryngeal obstruction.

TREATMENT.—Antihistamines are indicated for itching. Urticaria is usually self-limiting but may last for years. Caution the patient to avoid reexposure to sensitizing foods or drugs. Epinephrine 1:1000 may be administered for laryngeal obstruction.

Calluses and Corns

These are callous skin lesions that normally occur on the feet or toes. Faulty fitting shoes are the common cause.

SYMPTOMS.—There is usually tenderness or sensitivity to pressure. These lesions may be differentiated from plantar warts by their glassy cores.

TREATMENT.—Soak the affected area in warm water and carefully pare the callus. Correct any orthopedic abnormalities, and make sure the patient's shoes fit correctly.

Herpes Simplex

This is a recurrent viral infection characterized by the sudden appearance of small vesicles on the skin or mucous membranes, usually around the mouth. The vesicles are filled with a clear fluid on a slightly raised inflammatory base. It normally occurs in childhood and occurs in most people from time to time. The genitals, conjunctiva, lips, and cornea are often the sites of infection.

SYMPTOMS.—The appearance of cold sores is usually preceded by severe itching or tingling sensations. The vesicles may group together to form large lesions and are often painful. The vesicles will normally disappear within 10 days and reoccur at the same sites. Herpes simplex may be differentiated from herpes zoster because the latter is rarely recurrent, is more painful, and produces larger vesicles.

TREATMENT.—Apply drying lotions. Topical antibiotics will control most secondary infections. If the eye is affected, do not use corticosteroids because these may predispose the patient to dendritic ulcer formation.

Herpes Zoster

Shingles is an acute viral infection of the central nervous system characterized by vesicular eruptions and neuralgic-type pain in areas supplied with peripheral sensory nerves. This infection is caused by the same virus that causes chickenpox (varicella) and is most commonly encountered in persons over the age of 50.

SYMPTOMS.—Chills, fever, malaise, and gastrointestinal disorders may precede distinctive features of the disease. On about the fourth or fifth day, crops of vesicles appear on an erythematous base in the area of the involved nerve. Pain may be present at this time; however, the skin in the involved area is extremely sensitive.

TREATMENT.—No specific remedy exists. The disease normally clears with no permanent damage except for scarring or postherpetic neuralgia. A corticosteroid such as prednisone may help to shorten the duration and relieve some of the symptoms. Soothing lotions and powders are often effective, and aspirin or other analgesics may be administered for pain. NOTE: Before giving a corticosteroid, rule out herpes simplex.

Verrucae

Warts are very common, contagious, benign epithelial tumors that may persist as single lesions or develop satellites. Occasionally the warts may disappear spontaneously.

TREATMENT.—The warts themselves may be easily removed; however, the virus often remains producing recurrent warts at the same or different sites. Therefore, it is often advisable to leave single warts alone. Trichloroacetic acid should be appled to warts every 3 to 4 days, followed by phenol neutralized with alcohol or nitric acid when the wart whitens. If the warts are in warm, moist anogenital areas, podophyllum resin in tincture of benzoin is often effective. Plantar warts, found on the soles of the feet, are warts that have been flattened by pressure and are usually very painful. These are the most difficult warts to remove. Peel away the keratotic tissue and apply a concentrated phenol solution. Follow this with an application of nitric acid, and cover it with a salicylic acid plaster and adhesive bandage. Repeat this treatment every 5 days; it normally takes from three to seven treatments for complete resolution. Patients may be referred to a dermatologist for other wart removal techniques such as freezing and electrosurgical or surgical excision.

Impetigo

This is a superficial staph or strep skin infection.

SYMPTOMS.—Normally lesions consist of small pustules, but they may be larger with rupturing and crusting. The lesions may remain localized but are often autoinoculated over large areas. It is most commonly found in children. Impetigo may appear on apparently healthy skin but sometimes complicates other skin infections.

TREATMENT.—Topical antibiotics will normally result in prompt resolution. Gentle but thorough washing to remove any crust and debris should precede the application of ointment. If left untreated, impetigo may result in cellulitis or furunculosis. These complications should be treated with systemic antibiotics.

Furuncles and Carbuncles

A furuncle (boil) is an acute tender inflammation around perifollicular areas that is caused by staphlococci. Carbuncles are groups of furuncles adjacent to one another.

SYMPTOMS.—A furuncle has a single core of necrotic tissue. The core exudes a purulent fluid and is most commonly found on the neck, axillae, and buttocks. These lesions are extremely painful. A carbuncle has two or more cores with multiple drainage sites and deep suppuration. There may be extensive sloughing of the tissues with large scar formation. A fever may be present and the patient is often prostrated. Carbuncles occur more frequently in men.

TREATMENT.—A single furuncle should be treated with moist heat to facilitate pointing. Once it has pointed, incise and attempt to remove the central core. Implant an iodoform pack to promote drainage and to prevent premature healing. Systemic antibiotics are indicated. Large furuncles and carbuncles require special care in debridement to avoid spreading the infection. Refer severe cases to a dermatologist.

Cellutitis

This is a spreading inflammation of the tissues, which usually affects the skin and subcutaneous tissues. Streptococcus and staphylococcus are the causative agents.

SYMPTOMS.—These include fever, chills, malaise, headache, acute pain upon palpation, and swollen, red, and warm areas. Regional lymphangitis or lymphadenitis is common. Severe cases will often result in septicemia or bacteremia.

TREATMENT.—Place the affected part at rest and elevate. Bed rest is indicated if the condition is severe. Apply moist heat and administer erythromycin or lincomycin systemically. Continue the treatment until the symptoms have ceased for 5 days.

Folliculitis

This condition is the result of staphylococcal infection of hair follicles. Sycosis barbae is a chronic and recalcitrant type better known as barber's itch. It appears in the bearded area and is aggravated by shaving.

SYMPTOMS.—Burning and itching are common, and manipulation of hair cause pain.

TREATMENT.—Apply hot packs to the affected area. Apply topical antibiotics, and give systemic antibiotics if the areas around the eyes, nose, or mouth are involved (dangerous triangle).

Tinea Capitis

Ringworm of the scalp is a highly contagious fungal infection usually affecting school children.

SYMPTOMS.—It is characterized by small gray lesions in which the hair is broken off, scant, or without luster. It may involve all or a part of the scalp.

TREATMENT.—Griseofulvin is definitive and 0.5 g should be administered twice daily with meals for 4 to 8 weeks or a single dose of 2 to 6 g repeated every 3 to 4 weeks.

Tinea Corporis

Ringworm of the body is an infection that usually involves the trunk and upper extremities and is uncommon in temperate climates.

SYMPTOMS.—The lesions have raised borders spread peripherally and clear centrally. The various forms of this infection are pityriasis rosea, seborrheic dermatitis, and psoriasis. Tinea versicolor involves the upper trunk.

TREATMENT.—It is the same as for tinea capitis.

Tinea Cruris

Jock itch is a fungous infection occurring in the area of the upper inner thighs. Growth of the organisms is favored by obesity and tight clothing and is often recurrent.

SYMPTOMS.—They include severe itching with active erythematous macules with sharp margins and cleared centers.

TREATMENT.—Aluminum acetate, corticosteroid lotion, or short-term oral corticosteroids may prove effective. Griseofulvin may be indicated in chronic cases. Advise the patient to rinse all soap away and dry thoroughly when bathing.

Tinea Pedis

Athlete's foot is a very common fungal infection of the feet.

SYMPTOMS.—Normally the third and fourth interdigital spaces are first affected with subsequent spreading to the plantar surfaces of the arch. The lesions appear as macerated areas with scaling borders. When the toenails are involved, they become thickened and distorted. Tinea pedis may be mistaken for maceration due to excessive sweating.

TREATMENT.—Keep the feet clean and dry, change socks frequently, and apply an antifungal powder, ointment, or lotion.

Tinea Versicolor

This is a mild superficial fungal infection of the skin that occurs normally in the trunk area. Affected areas are resistant to tanning, and the fungus is more likely to occur in individuals who wear heavy clothing and tend to perspire freely. It occurs most frequently in tropical climates.

SYMPTOMS.—There may be mild itching. The lesions appear velvety and are chamois-colored macules that are easily scraped off with the fingernail. The trunk, upper arms, neck, and face are often affected.

TREATMENT.—Good skin hygiene is essential. Salicylic acid soap may be the most effective treatment. It recurs frequently.

Scabies

This condition is a parasitic skin infection characterized by superficial burrows, intense pruritus, and secondary inflammation. The female itch mite burrows into the epidermis and lays her eggs. The larva hatch, surface, mate, and repeat the cycle. Good hygiene helps prevent this infection. It is readily transmittable.

SYMPTOMS.—There is severe itching, especially at night. The male genitals, interdigital spaces of the hand, flexor surfaces on the wrist, areola of the breast in women, along the belt line of the abdomen, and the area of the lower buttocks are prone to inflammatory lesions. The face is rarely involved in adults. The burrows may be identified as fine, dark, wavy lines just beneath the skin. It may be hard to detect the burrows due to secondary lesions. A needle may be used to remove the parasite from its burrow to facilitate diagnosis.

TREATMENT.—General measures consist of vigorous cleansing of papules and vesicles during prolonged hot baths. Apply an emulsion or lotion containing benzocaine and benzyl benzoate from the area of the neck down. Reapply in 3 days to destroy the larvae.

Pediculosis Capitis

This is an infestation of the scalp, eyebrows, eyelashes, or beard by head lice. It is transmitted by personal contact with such items as combs and hats. Nits attach to the hair, resulting in severe itching.

Pediculosis Corporis

This condition is an infestation of the skin by body lice. The louse inhabits the seams of clothing and feeds on the skin, which results in severe itching and produces small red lesions occurring from the bites. The most common sites of lesions are the buttocks, shoulders, and abdomen. The body louse is an important vector in transmitting typhus, trench fever, and relapsing fever.

Pediculosis Pubis

This condition is characterized by infestation of the anogenital regions with crab lice. This infestation is the result of direct contact with the lice through sexual activity, toilet seats, clothing, or bedding. The louse is comparatively large but not easily seen, and itching is almost always present. The patient may note the presence of small specks on the sheets upon arising.

TREATMENT.—The treatment for all pediculosis infestations consists of applying ointments containing benzoate and benzocaine and maintaining proper hygiene habits. Use caution when treating around the eyes. Two applications of medication are usually sufficient. Check contacts. Use calamine lotion to control itching, and launder all bedding and clothing.

DISORDERS OF THE NERVOUS SYSTEM

Levels of Consciousness

Abnormal levels of consciousness may be associated with decreased or increased neurological activity such as stupor, coma, delirium, or violent behavior. There may be partial to complete mental clouding or loss of consciousness. Frequent causes are cerebrovascular accident (CVA), drugs, poisons, and fever.

The two major categories of loss of consciousness are stupor and coma. Stupor ranges from partial to almost complete loss of consciousness. Coma is complete unconsciousness from which the patient cannot be roused.

In any case of consciousness disorder, it is important to obtain a complete history from those who know the patient or who may have witnessed the incident causing it. Perform a thorough physical examination including checking the pupils for size and reaction to light. The key points to look for when a neurological disorder is suspected are abnormal vital signs, signs of injury, or alcohol or drug intoxication. Also look for discolorations of the skin in the area behind the ears that may indicate a skull fracture.

TREATMENT.—The immediate objective of treatment is to maintain life until a specific diagnosis is made. Avoid sedatives and stimulants, and keep semiconscious patients NPO. Catheterize unconscious patients and test the urine for sugar, acetone, and albumin. Treat symptomatically.

Syncope and Vertigo

Syncope is a temporary loss of consciousness as in fainting. Vertigo is an illusionary sensation of motion.

SYMPTOMS.—The patient is usually in an upright position when an attack occurs. He or she may experience motor weakness, epigastric distress, perspiration, restlessness, yawning and sighing, bradycardia, and a fall in blood pressure.

TREATMENT.—Place the patient in the shock position, and administer spirits of ammonia.

Headache

Headaches are so common that most everyone has some experience with them at one time or another. They may be caused by tension, tumors, trauma, or any number of other causes. The following are the more common types of headaches.

- Tension—These headaches are caused by spasm or contraction of diseased muscles or adjacent structures, or they may be associated with fatigue or emotional stress. The muscles attached to the occiput are the most frequently involved. This is the most common type of headache.

SYMPTOMS.—The common complaints are a feeling of pressure or tightness or a bandlike constriction and pain.

TREATMENT.—General measures consist of analgesics, rest, relaxation, massage, and heat applied to the involved musculature.

- Migraine—This type of headache is characterized by a paroxysmal attack often preceded by psychologic or visual disturbance that is followed by drowsiness. Women are affected more often than men. Migraine headaches are believed to be the result of vascular changes.

SYMPTOMS.—There is usually a throbbing sensation or pain resulting from vasoconstriction followed by dilation. The patient often experiences nausea and vomiting. Often there is a family history of migraines, and the frequency of attacks may vary from daily to once every few years. The pain is usually unilateral and may last for 2 or 3 days.

TREATMENT.—Cafergot® is the most widely used drug in the treatment of migraines. It should be administered at the first sign of headache (provided a history of migraine is obtained or you have actually diagnosed it). Place the patient on bed rest for a few hours in a darkened room and withhold any food or drink. At times the pain is so severe that narcotics may be necessary for pain; Demerol is the drug of choice. Codeine is contraindicated.

- Cluster—There is usually no clear history of headaches in the patient's family. Middle-aged males are most often affected, and the headaches may be precipitated by the use of vasodilators, alcohol, or histamine.

SYMPTOMS.—The onset is sudden and is characterized by severe unilateral pain that may disappear after 1 or 2 hours as rapidly as it came. Nocturnal attacks are common, and the patient may have associated symptoms such as redness and lacrimation of the eyes, rhinorrhea, and nasal congestion.

TREATMENT.—The pain of this headache is so severe that the patient should be kept on bed rest until the pain ceases. Administer Sansert® (methysergide maleate) to help prevent cluster headaches from becoming vascular headaches. Cluster headaches are so severe and of such short duration that adequate therapy is difficult; however, administering antihistamines may be effective.

- Hypertensive—Normally these headaches are the result of chronic hypertension. They are characterized by a persistent bilateral throbbing pain. The best treatment is to control the patient's hypertension. The patient may be helped by analgesics, understanding, and reassurance.

Epilepsy

This is a convulsive disorder that is characterized by abrupt transient symptoms of a motor, sensory, psychic, or autonomic nature. Attacks are usually accompanied by altered levels of consciousness, and there is usually a history of epilepsy in the patient's family. The onset of epilepsy is usually before the age of 30. There are several types of epileptic seizure classifications. The three major classifications are generalized, partial, and unclassifiable epilepsies. The generalized epilepsies are the most commonly encountered and include the petit mal and grand mal types.

- Grand Mal Seizures—These are divided into the following two groups.

- Jacksonian Seizure—This type of seizure is characterized by an aura, often referred to as a warning, but which in reality is a part of the seizure. The patient will experience convulsions without lapsing into unconsciousness. The seizure may start in the toes or thumbs or in the face (the eyes and head may turn to one side), and the seizure may then spread to other areas.

- Typical Grand Mal Seizure—This type of seizure may have the initial aura as described above. The patient may fall down and cry out, lose bladder and bowel control, and froth at the mouth. There is convulsive movement of the body, dyspnea, and cyanosis. Corneal reflexes are usually absent and Babinski's reflex is positive. Often the patient bites the tongue and, if not completely unconscious, will be confused and disoriented. The seizure usually lasts 2 to 5 minutes. A period of deep sleep is common after the seizure, and the patient will complain of muscle soreness and stiffness upon awakening.

TREATMENT.—Immediate treatment is aimed at preventing the patient from injuring himself or herself. A tongue depressor or other type of padded gag should be placed between the patient's teeth to prevent biting the tongue; however, this may not be possible if the jaws are clenched. Don't force it. Never try to restrain a patient during convulsion; however, do not leave the patient alone. Loosen the clothing around the neck and turn the head to the side to prevent aspiration of saliva and mucus. After the attack, administer anticonvulsants such as bariturates or Dilantin®. The objective of drug therapy is complete supression of symptoms. Refer the patient for evaluation.

- Petit Mal Seizure—This type of seizure is characterized by myoclonic jerks (shocklike contractions of all or a part of a muscle or group of muscles), akinetic seizures (abnormal absence of muscular movement or loss of muscle tone), and sudden clouding of consciousness for a few seconds. Also the patient will normally not fall down. The classical symptoms of a sudden vacant expression, cessation of motor activity, and loss of muscle tone are almost always present. This condition is very common in children but almost never occurs after the age of 20. Activity will resume abruptly. The patient may experience as many as 100 attacks per day.

TREATMENT.—Administer phenobarbital or other anticonvulsants. Refer the patient for evaluation.

Cerebrovascular Accident

Strokes are caused by destruction of brain matter by intracerebral hemorrhage, thrombosis, embolism, or vascular insufficiency.

SYMPTOMS.—They include headache, nausea, vomiting, convulsions, and coma. Consciousness may not always be altered. The patient may experience speech disturbances, confusion, loss of memory, reduction of sensation, and paralysis of extremities or of a complete side of the body. The onset may be sudden and violent with the patient falling into an immediate coma and exhibiting stertorous breathing. Death from serious strokes may result in a few minutes to a few days.

TREATMENT.—Administer IV fluids, and place the patient on immediate and strict bed rest. Evacuate the patient for hospitalization immediately.

Subarachnoid Hemorrhage

This is characterized by sudden bleeding into the subarachnoid space that may be the result of trauma or a ruptured aneurysm.

SYMPTOMS.—Before the aneurysm ruptures, it may apply pressure to nerves that will manifest as headaches, ocular palsies, diplopia, squint and facial pain, and a diminished visual field. After rupture, severe headache, nausea and vomiting, stiffness of the neck, positive Kernig's sign, and bilateral Babinski's reflex are usually present. The consciousness of the patient may or may not be affected, and the blood pressure is often elevated.

TREATMENT.—Keep the patient at rest and maintain a fluid balance, avoid opiates and anticoagulants, and evacuate the patient immediately.

TRAUMATIC CONDITIONS OF THE CENTRAL NERVOUS SYSTEM (CNS)

Head Injuries

Head injury is the most common of the traumatic conditions of the CNS. These may be open or closed, and in each case of head injury, a neurological evaluation should be performed.

- Concussion—This is the most common form of head injury and may be diagnosed by an altered state of consciousness; abnormal vital signs; bleeding from the ears and nose; convulsions; and altered pupillary reactions. The patient normally recovers with no permanent damage; however, recurrent concussion may cause permanent damage.

Extradural hematoma is hemorrhage into the extradural spaces. This condition is a rare occurrence. The patient will suffer a loss of consciousness at the time of the injury and eventual coma with several hours of lucidity in between. While lucid, the patient will exhibit signs of increased intracranial pressure, such as headache, irritability and mental confusion, variations in level of consciousness, and hemiplegia (paralysis on one side of the body). The condition will deteriorate and death will result if the problem is not corrected.

Subdural hematoma is caused by the rupture of a cerebral vein. There will normally be a loss of consciousness at the time of the injury followed by an asymptomatic period that may last for several days or weeks. Later the patient may have symptoms of increased intracranial pressure as described above. About one-half of all persons with subdural hematoma will experience facial muscle weakness.

TREATMENT.—Ensure that the patient has a patent airway. If oxygen is to be administered, a nasal catheter is the preferred method of administration. Manipulation such as suturing or setting fractures should be held to a minimum until the patient's condition is stable. If the patient demonstrates extreme restlessness that may further complicate his or her condition, sedate quickly; otherwise avoid sedation. DO NOT attempt to stem bleeding or the escape of fluids from the ears or nose. Tell the patient to try to avoid sneezing, coughing, or blowing the nose. Evacuate the patient immediately.

Herniated Disk

In most cases, herniation or rupture of an intervertebral disk is the result of trauma. It may occur with sudden straining of the back in an odd position or while lifting in the trunk flex position. Herniation may occur immediately or may take years to occur. Most herniation occurs in the lumbosacral area but may also occur in the cervical or thoracic regions.

SYMPTOMS.—Over 90% of all herniated disks occur at the fourth or fifth lumbar interspace. There is pain upon palpation, and the patient will have a limited range of motion. The posture of the spine will be abnormal due to its loss of curvature. The patient may exhibit mild weakness of the foot or extensor areas of the great toe. There may be impaired sensations of pain or touch, and coughing or sneezing may cause radiation of the pain to the calf.

TREATMENT.—Place the patient on bed rest with a backboard and administer analgesics for pain. If possible, apply traction and prevent the patient from using any severe physical effort. Applications of heat to the area of tenderness is beneficial. Definitive treatment of herniated disks will normally require surgery. Therefore, evacuate the patient as soon as possible.

PSYCHIATRIC DISORDERS

Psychiatric disorders are more commonly encountered now than at any time in the past. This is due in part to improved diagnostic techniques, changing technology, and many other factors. Psychiatric disorders run the gamut from anxiety reactions to schizophrenia. The independent duty hospital corpsman is not properly trained to treat acute psychiatric disorders. In cases of acute or extremely antisocial behavioral disorders, or if the patient represents a threat to himself or herself or others, evacuate for psychiatric evaluation as soon as possible.

ENDOCRINE DISORDERS

The following are some of the more commonly encountered disorders of the endocrine system.

Diabetes Mellitus

This is a hereditary disease characterized by an inadequate secretion and production of insulin by the pancreatic beta cells. It may also be caused by destruction of the pancreas from disease or tumors.

SYMPTOMS.—In children and young adults, diabetes is normally characterized by a sudden onset of symptoms. The onset is more insidious in older patients. The classic symptoms of polyuria, polydipsia (excessive thirst), hunger, weight loss, itching, blurred vision, and fatigue will normally be the first signs of diabetes. There are many complications that arise from this disease. In many instances, diabetes may not be detected until the rise of these complications that include ketosis, acidosis, and coma (often the result of inadequate insulin, although coma may also be induced by hypoglycemia); vascular complications (i.e., slow healing injuries, ulcers, and decreased blood supply to feet); diabetic neuropathy (e.g., tingling, paresthesias, decreased or absent sweating); and skin infections.

TREATMENT.—The treatment for diabetes is centered around restoring the patient's metabolism and maintaining the general health and nutritional state. The diabetic diet is a normal diet with the exception that caloric and carbohydrate intake is restricted. Oral hypoglycemia agents are well tolerated as a rule. A physician will prescribe insulin therapy for patients whose hypoglycemia cannot be controlled by alternate methods. When diabetes is suspected, refer the patient for definitive diagnosis.

Diabetes Insipidis

This is a chronic disorder of the pituitary gland or hypothalmus that is the result of a deficiency of vasopressin (also called the antidiuretic hormone or ADH). Inadequate ADH secretion reduces water resorption and is more frequently found in males. Trauma or tumors may also cause this condition.

SYMPTOMS.—The onset is normally slow with increasing polydipsia and polyuria. If preceded by trauma, infectious disease, or emotional shock, the onset may be abrupt. The patient will exhibit thirst, drinking up to 40 liters per day. The patient experiences rapid dehydration when fluid intake is altered. Rapid weight loss will follow the rapid dehydration.

TREATMENT.—In almost all cases, vasopressin tannate in oil given IM (never IV) normally controls the symptoms. Diuretics such as hydrochlorothiazide will normally reduce urinary output.

Hyperthyroidism

This disease is characterized by excessive secretion of the thyroid hormones, increased metabolic rate, and exophthalmos (protrusion of the eyeball).

SYMPTOMS.—These include weakness, nervousness, sensitivity to heat, restlessness, weight loss, increased appetite, eyelid sag, headaches, nausea, abdominal pain, diarrhea, and an enlarged thyroid. Normally there is a history of hyperthyroidism in the family.

TREATMENT.—Refer the patient for definitive evaluation.

Hypothyroidism

Myxedema is a condition in which decreased thyroid secretions produce characteristic reactions. This condition may be the result of radioiodine therapy, surgical excision, or atrophy of the pituitary gland.

SYMPTOMS.—There is a gradual personality change with the patient becoming more and more apathetic. Characteristic myxedematous features such as an enlarged tongue; slow deep-toned speech; dry, thickened, edematous skin; and puffiness of the eyelids, hands, and face are common. Alopecia (loss of hair) of the scalp and eyebrows is common. The patient will complain of drowsiness, increased sensitivity to cold, and constipation, and the deep tendon reflexes will be delayed.

TREATMENT.—Refer the patient for definitive evaluation and treatment.

Addison's Disease

This disease is an insufficiency of the adrenocortical hormones. It is an insidious progressive disease that is characterized by increasing weakness, fatigability, increased pigmentation of the skin and mucous membranes, weight loss, hypotension, dehydration, anorexia, nausea, vomiting, and occasional hypoglycemia. The cause of this condition is normally due to adrenocortical atrophy of unknown etiology. Other causes include inflammatory necrosis, neoplasms, and granuloma.

TREATMENT.—Refer the patient for definitive evaluation.

FEMALE SPECIFIC CONDITIONS

As the roles and numbers of women entering the naval service have increased, so has the role of the independent duty hospital corpsman expanded. With the assignment of women to duty aboard ships, the responsibilities for taking care of the health care needs of the ship's personnel have expanded to include those of the Navy's women.

Most of the conditions and complaints that bring women to seek medical attention will be no different than those of their male counterparts. However, there are some conditions that are obviously limited to females. To effectively treat these conditions, you must become familiarized with the female anatomy and physiology, techniques of physical examination, and diagnosing and treating the more commonly encountered female specific conditions.

With the exception of the female genitals and the breasts, the techniques for physical examination as discussed earlier in this chapter will apply to both males and females. The Navy policy as set forth in the Manual of the Medical Department (MANMED) establishes the requirement that in other than emergency situations or when totally impractical, no member of the Medical Department will examine or treat a member of the opposite sex without the presence of a witness. That witness, whenever possible, must be a member of the same sex as the patient.

Menstrual History

Just as there are certain aspects of the physical examination of women that differ from the physical examination of men, there are also different types of information to be extracted during the medical history. The single most important part of the history to be taken when a woman presents with a gynecologic condition is the menstrual history. It should be remembered that many women are currently taking oral contraceptive pills that may modify the menstrual cycle. No history of the menstrual cycle is complete without making a note of the form of contraception employed. The following points are important data concerning the menses.

- Age of Onset—An unusually late or early menarche (beginning of menstrual function) may be indicative of various endocrinopathies.

- Interval—Although the typical menstrual interval is 28 days, there are many variations, even in otherwise normal women. The normal range is 21 to 35 days and any departure from normal must be viewed as potentially produced by various patholgic conditions.

- Duration—As stated above, any change from the normal must be viewed as possibly the result of a pathologic condition. The quantity of the flow frequently parallels the duration; a prolonged flow will generally be excessive. The normal duration of the flow is from 2 to 7 days.

- Quantity—A marked reduction in the flow may indicate certain endocrinopathies, while a marked excess may indicate a dysfunctional disorder or other problems.

- Character of Menstrual Flow—Normal appearance of menstrual blood is dark venous and unclotted. Bright red, clotted blood is the type of flow seen in excessive menstruation.

- Menstrual Pain—Painful menstruation (dysmenorrhea) is one of the most frequently encountered of all gynecologic complaints. The character of the pain or cramps, onset, and duration should be determined. Most menstrual pain will begin the day of onset of menses. Any increase of severity of pain or the appearance of pain in a previously asymptomatic woman requires further investigation.

- Intermenstrual Bleeding—Intermenstrual bleeding is a serious symptom. Even light bleeding frequently can indicate organic causes such as polyps, erosion of the cervix, and occasionally cervical malignancy.

- First Day of the Last Menstrual Period (LMP)—Many women are unsure of the exact date their LMP began; however, it is important to establish it. Dates are necessary to determine whether the cycle is irregular as well as to establish the time of conception.

- Other Specific Areas to Record—List histories of vaginal discharge (leukorrhea) and such characteristics as the duration, odor, consistency, and color. When recording the obstetric history, include past and present urinary symptoms and any nausea or vomiting. It is important to list the patient's sexual history when STD is suspected or when there are complaints of painful coitus or postcoital bleeding.

PHYSICAL EXAMINATION OF THE FEMALE GENITALIA

Before starting an examination of the female genitalia, get a history of any urinary tract infection symptoms, such as pain, frequency, and urgency. If the patient has symptoms, you can then determine the appropriate method of specimen collection. The next step is to ask the patient to void. After voiding (or collecting a specimen), place her in the dorsal lithotomy position (lying on the back with thighs flexed and abducted). Place a pillow under her head and put the feet in stirrups. The buttocks should extend slightly over the edge of the table.

The examination of the genitals will be divided into three distinct parts.

- External Genitalia—Inspect the mons pubis, labia, perineum, thighs, and lower abdominal regions. These are illustrated in figures 2-1 and 2-2. Using a gloved hand, separate the labia majora and inspect the labia minora, the clitoris, urethral orifice, and the introitus. Make

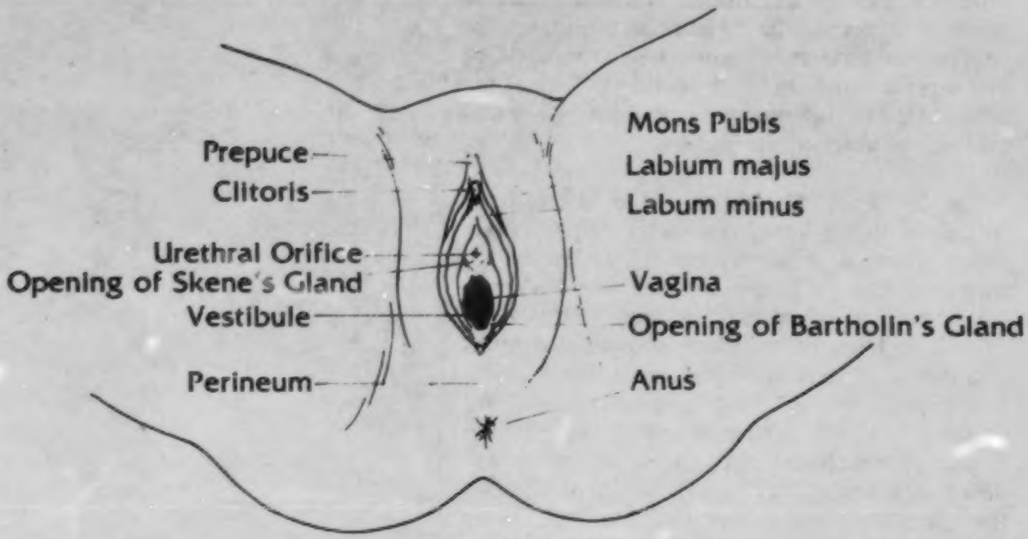

Prepuce
Clitoris
Urethral Orifice
Opening of Skene's Gland
Vestibule
Perineum
Mons Pubis
Labium majus
Labum minus
Vagina
Opening of Bartholin's Gland
Anus
159.32

Figure 2-1.—The female reproductive system—anterior view.

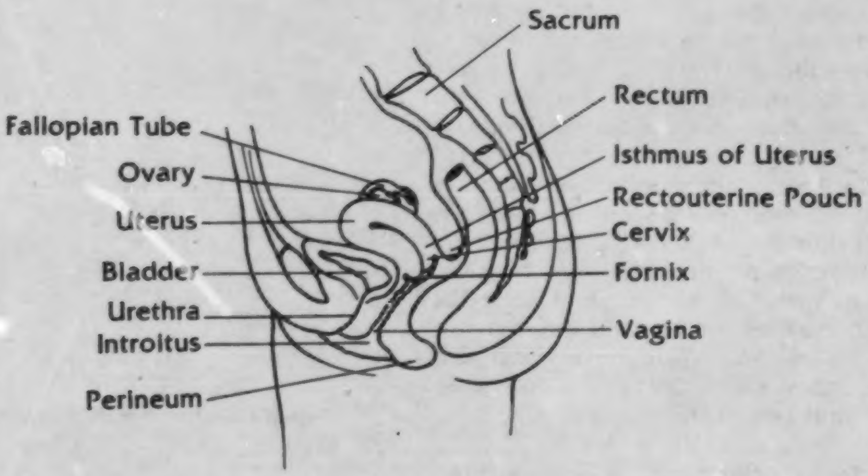

Sacrum
Rectum
Fallopian Tube
Isthmus of Uterus
Ovary
Rectouterine Pouch
Uterus
Cervix
Bladder
Fornix
Urethra
Introitus
Vagina
Perineum
159.33

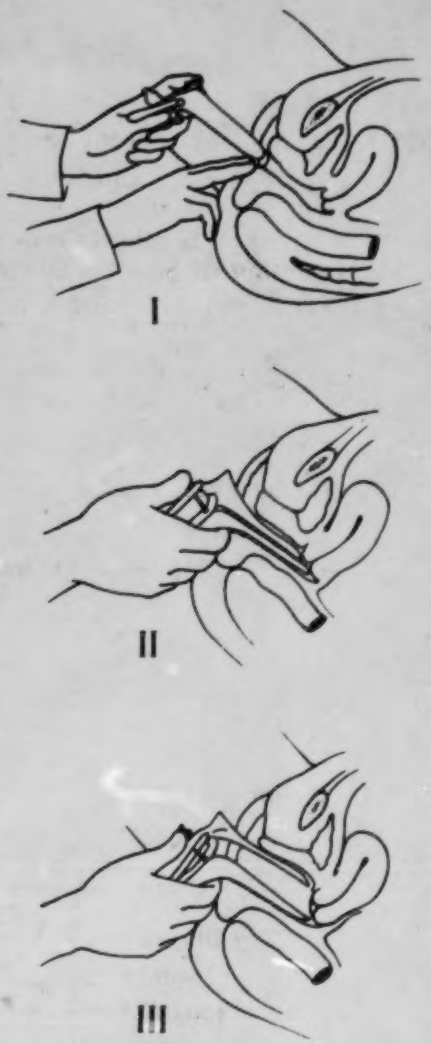
Figure 2-2.—The female reproductive system—lateral view.

a note of any swellings, ulcerations, inflammations, and nodules. Note any sign of discharge and any sores or lesions. Insert your index finger into the vagina, and milk the urethra gently from the inside to the outside. If there is any discharge, culture it on room temperature, Thayer-Martin media. If the labia are swollen, or if the patient has a history of past infections of the Bartholin's gland duct, insert your finger into the vagina at the posterior aspect of the

49

introitus and your thumb on the outside posterior aspect of the labia majora. Palpate for swelling or tenderness, and check for signs of discharge around the duct openings. Repeat the procedure for the opposite side. Note any bulgings of the anterior vaginal wall.

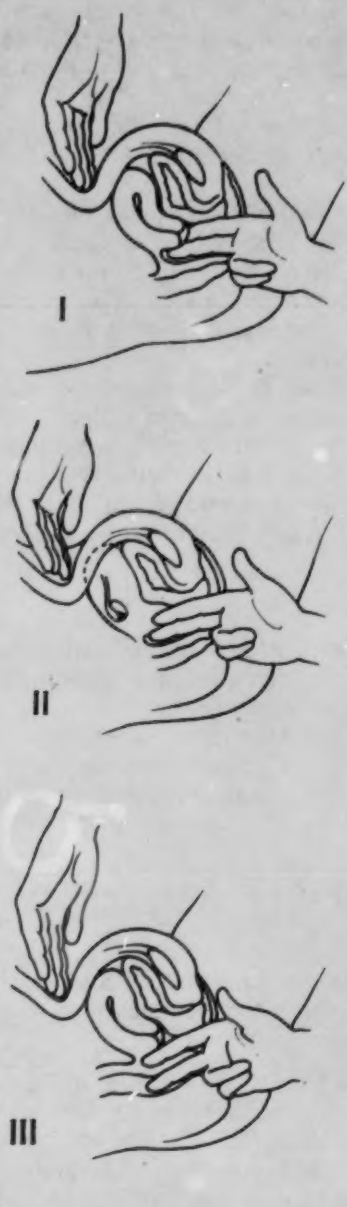
- Internal Genitalia—Use a vaginal speculum that has been warmed to body temperature. Use a medium-sized Graves for women without a hymen and medium Pederson for women with an intact hymen. Instruct the patient to bear down. Place your gloved index and middle fingers at or just inside the introitus as shown in figure 2-3 (I), and exert downward pressure on the perineum. With your other hand, gently insert the speculum at a 45° downward angle (fig 2-3 (II)). When inserting the speculum, make sure that the blades are closed and held at an oblique angle. Remove your fingers from the introitus, and rotate the blades of the speculum horizontally while maintaining downward pressure with the speculum. When the blades are fully inserted, open the blades and rotate the speculum until the cervix comes into view. Lock the blades into the open position using thumbscrew (fig 2-3 (III)). Inspect the cervix making note of the color, position, bleeding, discharge, ulcerations, and masses. After obtaining the necessary cervical specimens, withdraw the speculum while slowly rotating it to observe the vaginal mucosa. Release the thumbscrew, but keep the speculum blades in the open position with hand pressure. During withdrawal of the speculum, note the color of the vaginal mucosa and any signs of masses, ulcerations, inflammations, and discharges. Allow the blades to close only when the speculum is free of the introitus.



159.34

Figure 2-3.—Insertion of the vaginal speculum.

- Bimanual Examination—Insert your well-lubricated gloved index and middle fingers into the vagina exerting pressure posteriorly. Note any areas of tenderness or swelling in the vaginal walls. Identify the cervix and note its position, consistency, mobility, and indications of cervical tenderness on motion. Palpate the fornix as illustrated in figure 2-4 (I). Using your other hand (referred to as the abdominal hand), palpate downward midway between the umbilicus and the symphysis pubis toward your pelvic hand. Identify the uterus between your hands noting any masses or tenderness, the size, shape, consistency, and mobility (fig 2-4 (II)). Place your pelvic hand in the right lateral fornix and your abdominal hand in the right lower abdominal quadrant. Exert downward pressure with your abdominal hand and palpate the ovary. Note the size, shape, consistency, and presence of any masses or tenderness. Repeat the procedures for the left side.



159.35

Figure 2-4.—Techniques of bimanual examination.

Withdraw your fingers from the vagina. Relubricate if necessary, and then slowly introduce your middle finger into the patient's rectum and your index finger into her vagina (fig 2-4 (III)). The anal sphincter may be relaxed by asking the patient to bear down while you are introducing your fingers. Repeat the steps of the bimanual examination. Pay special attention to the region that lies behind the cervix and the posterior uterine surface itself, as these areas may only be accessible to the rectal finger. Take note of any masses or areas of tenderness. Look for signs of rashes, excoriation, and external hemorrhoids.

COMMONLY ENCOUNTERED FEMALE CONDITIONS

Vaginitis

This is an inflammation of the vaginal mucosa caused by fungal, bacterial, or mechanical factors. The zone of inflammation may extend from the vagina to the cervix and the vulvar region. It may be caused by inflammations of Bartholin's or Skene's gland ducts. The three most commonly encountered forms of vaginitis are *Trichomonas*, *Monilia*, and bacterial.

- *Trichomonas* Vaginitis—The etiologic agent in this form of vaginitis is *Trichomonas* vaginalis.

SYMPTOMS.—The most prominent symptom will be leukorrhea. With this type of vaginitis, the discharge may be thick or thin and profuse, may have a fetid odor, and will range in color from white to greenish-yellow. The discharge is often pooled in the vaginal fornix and is quite often bubbly in appearance. Visualization of the vaginal mucosa will disclose a red, inflamed mucosa and cervix with small red, granular, strawberry-looking spots. The patient will normally reveal a history of vulvar (external genitalia) irritation, vaginismus (painful spasms of the vagina), dyspareunia (painful coitus), and itching. Motile *Trichomonas* vaginalis organisms may be noted in a fresh wet preparation made by diluting the secretions with normal saline and examining the preparation under a microscope.

TREATMENT.—Flagyl® (metronidazole) is administered in 250-mg doses 3 times a day for 1 week. However, this drug is contraindicated in pregnancy and should, therefore, not be administered until pregnancy has been ruled out. A vinegar douche (2 tablespoons of vinegar to 1 quart of warm water) administered once or twice a week may prove beneficial.

- *Monilia* Vaginitis—This inflammation is the result of an overgrowth of the *Candida albicans* yeast. History may show a recent period of antibiotic therapy. Yeast infections are more common in warm, moist climates. Patients with persistent or recurrent monilial infections should be investigated for possible diabetes.

SYMPTOMS.—The discharge is most often thick, curdlike, white in color, and may have a musty odor. This discharge is not usually as profuse as the discharge of *Trichomonas.* Visual examination may reveal a red, inflamed vaginal mucosa, with white or grayish patches of discharge. When these patches are scraped off, there is frequently a small amount of bleeding. Vulvar irritation, itching, vaginismus, and dyspareunia are common. Preparation of a wet smear with 15% potassium hydroxide added will help to visualize the Candida hyphae and spores.

TREATMENT.—MONISTAT® 7 vaginal cream (miconazole nitrate 2%) administered once daily over a 2-week period is the treatment of choice. Hydrocortisone 1% cream applied locally to the vulva 3 times a day will help relieve local irritation and itching. Mycostatin® vaginal tablets taken once daily at bedtime for 15 days may also be used.

- Bacterial Vaginitis—The etiologic agent may range from *Haemophilus* vaginitis to *Neisseria* gonorrhea and a wide range of other bacteria.

SYMPTOMS.—The discharge in this form of vaginitis may range from scanty to profuse, may have a foul or musty odor, may be viscid to watery in consistency, and the color may range from greenish-yellow, brown, pink, gray, or milky white. The vaginal mucosa may be red and swollen, but this is not always true. Vulvitis, urethritis, and ulceration of the cervix are commonly accompanying symptoms. Infections of the Bartholin's and Skene's glands are common, especially in gonorrheal infections. A purulent discharge is often seen exuding from the cervical os, and pain and swelling of the cervix itself is often noted. The only definitive method of determining the specific etiologic agent is through a culture.

TREATMENT.—General measures consist of perineal and vulvar hygiene to control pruritus and local itching. Specific measures include vaginal applications of sulfa creams once daily for 2 weeks. Ampicillin taken orally may also be beneficial.

When the causative agent is unknown, a broad-spectrum drug such as Betadine® vaginal gel may prove effective in treating any of the more commonly encountered types of vaginitis. A culture for *Neisseria* gonorrhea should always be considered in sexually-active women.

Vulvitis

This is an inflammation of the vulvar region. The causes include mechanical and chemical irritation; hygiene neglect; urinary, fecal, or vaginal contamination; allergic reactions to detergents or drugs; parasitic infestations (pediculosis pubis); herpes simplex; psoriasis; condylomata acuminata; and follicultitis.

SYMPTOMS.—They include burning, severe pain, pruritus, redness, swelling, ulceration, pustular formation, edema, and vesicular itching. Areas of irritation may extend to the perineal region and the inner areas of the thighs.

TREATMENT.—When a specific infection exists, treat the cause. Symptomatic relief may be obtained by the use of cool compresses of Burow's solution or tepid sitz baths. The area should be kept as clean and dry as possible, and the use of soaps and other harsh cleansing agents should be avoided, as they tend to dry the tissues and increase irritation. If an allergic reaction is the suspected cause, oral antihistamines may prove beneficial. Hydrocortisone 1% cream is often helpful. Chronic or intractable cases should be referred to a medical treatment facility as soon as possible.

Cysts and Abscesses of Bartholin's Gland

Infections, most commonly gonorrhea, may involve Bartholin's duct and gland causing obstruction that prevents the drainage of secretions. This in turn leads to pain and swelling on either side of the introitus. A localized fluctuant swelling in the interior portion of the labia minora indicates an occlusion of the duct opening. Pain without undue swelling indicates an occlusion of the duct opening and an active infection of the gland itself. The patient's vital signs may be elevated. An abscess presents as a tense, hot, and tender local swelling. There may be pus or exudate in the region of the duct opening. Cysts are manifestations of chronic involvement and are normally not tender.

TREATMENT.—If there is no abscess formation apparent, treat the patient with broad-spectrum antibiotics. Warm saline soaks will help to localize the infection. If an abscess is present, refer to a medical facility.

Salpingitis

Salpingitis, or pelvic inflammatory disease (PID), is an inflammation of the uterine tubes. It may be acute or chronic as well as unilateral or bilateral. It is almost always bacterial in origin and is commonly, though not always, caused by gonococci.

SYMPTOMS.—The patient will frequently reveal a history of vaginal coitus. There may be a greenish-yellow discharge present. The patient normally experiences severe nonradiating lower abdominal cramps in acute cases. Chills, moderate fevers, and a history of menstrual irregularity are common complaints. When a patient presents with a acute abdominal condition, it is essential to diagnosis it correctly. Pain accompanied by uterine bleeding and signs of shock would be suspect of ectopic pregnancy. Examination of the internal genitalia may reveal pus exuding from the cervical os or urethra, and the tender adnexal (pelvic) masses may be palpable.

TREATMENT.—Whenever an acute abdominal condition is evident, the patient should be transferred for definitive treatment as soon as possible. Start the patient on 4.8 to 12 million units of aqueous penicillin G IM in divided doses. If the patient is allergic to penicillin, she is given Vibramycin® (doxycycline) 200 mg to start, followed by 100 mg twice a day for 7 to 10 days. Analgesics may be administered to relieve pain.

Premenstrual Tension Syndrome

This syndrome is characterized by nervousness, depression, irritability, emotional instability, headaches, and mastalgia (painful breasts). The cause of this syndrome is unknown but may be due to fluid retention with edema of the nerve tissues.

TREATMENT.—Generally, with the exception of a sympathetic ear and reassurance, no treatment is required. Mild analgesics may be prescribed to relieve headaches and mastalgia. In severe cases, limiting salt and using intermittent diuretics during the last 7 to 10 days of the menstrual cycle may be of value. The course of this syndrome is progressive and self-limiting, and it will usually clear up within the first few hours of onset of the menstrual cycle.

Dysmenorrhea

Dysmenorrhea is classified as either primary or secondary. Secondary dysmenorrhea is an acquired type and occurs most frequently as the result of an organic cause such as salpingitis, uterine tumors, and endometriosis. Normally secondary dysmenorrhea occurs in the third and fourth decades of life. Thus, hospital corpsmen onboard ships will not normally be required to treat this type of disorder. The more frequently encountered primary dysmenorrhea is painful menses for which no organic cause can be found. Excessive release of prostaglandins from the endometrium may be one cause. Cervical obstruction and vasoconstriction are other possible causes.

SYMPTOM.—Pain may develop approximately 1 to 2 days before the onset of menses. The pain may be dull or sharp and cramping and may be referred to the legs and suprapubic regions. Associated symptoms include mastalgia, nausea and vomiting, depression, and abdominal distention.

TREATMENT.—This condition is also self-limiting and is best treated symptomatically. Treatment is dependent upon the severity and extent of the symptoms. Many women have pain, but few will be incapacitated by it. The basic keynotes of patient care, understanding, sympathy, and reassurance are essential in relieving some of the patient's anxieties. Advise the patient to engage in a program of physical exercise; however, fatigue should be avoided as it tends to decrease the patient's tolerance of pain. Mild analgesics and antispasmodics may be administered, and for severe and incapacitating pain, light duty and bed rest for 1 or 2 days may be indicated. Refer the patient to a medical treatment facility for evaluation if the dysmenorrhea is interfering with the performances of duties.

Amenorrhea

Menstrual cycles that are absent or more than 6 months apart are considered to be amenorrhea. The causes of amenorrhea include ovarian or uterine tumors, obstruction, endocrine function abnormalities, and pregnancy, which is discussed next. Refer nonpregnant patients with primary amenorrhea for evaluation.

In addition to amenorrhea, any other type of abnormal uterine bleeding patterns should be referred as soon as possible for definitive diagnosis and treatment.

Pregnancy

Diagnosis

A woman will usually suspect that she is pregnant before coming to sick call for confirmation. The physical changes that occur in pregnancy are variable and may not hold true in all cases, so make sure that a false diagnosis is not made. The patient will normally reveal a history of recent coitus with subsequently missed periods. The classic symptom of morning sickness is common. Pelvic examination may reveal a soft, enlarged uterus (detectable at or about the sixth week) and a purplish hue to the cervix and the surrounding vaginal mucosa. There may be frequency of urination and some amount of breast enlargement and tenderness. Laboratory diagnosis is accomplished by means of several tests that are available through the Federal Stock Catalog and are complete with instructions. In the event of a pregnancy aboard ships, consult BUMED and NAVMILPERSCOM instructions for disposition. Refer the patient for an obstetric workup.

Emergency Conditions in Pregnancy

- Ectopic Pregnancy—This condition results when a fertilized ovum is implanted and develops outside of the uterine cavity. Ectopic gestation occurs in approximately 1 out of every 200 pregnancies. Most of the time the implantation occurs in the fallopian tube.

SYMPTOMS.—The patient will reveal a history of amenorrhea or irregular menses, followed by a sudden onset of bleeding. There may or may not have been a previously diagnosed pregnancy. She may complain of severe abdominal cramping pain in the lower quadrant. The pain is nonradiating, and a soft, tender pelvic mass may be palpable. The decidual tissues may pass and the patient may show signs of shock.

- Spontaneous Abortion—This is termination of gestation before the twenty-fourth week of pregnancy. Most spontaneous abortions are the result of ovular or sperm defects. It may be the result of anatomic malformation of the fetus or diet deficiencies.

SYMPTOMS.—The patient will reveal a history of amenorrhea or irregular menses. A previous diagnosis of pregnancy may or may not have been established. The usual signs and symptoms of pregnancy are often lacking. An abortion is classified as follows:

- Treatened—This is any time vaginal bleeding or pain occurs after conception.

- Imminent—Bleeding is heavier and cervical effacement or dilation is present, and it may be accompanied by cramping pain.

- Inevitable—The membranes are ruptured and portions of tissue may be visible at the cervical os.

- Incomplete—Some tissue has been passed, and the remainder of the conceptus remains in the uterus.

- Complete—There is total passage of all parts of the conceptus.

- Missed—The viability of the pregnancy has been terminated for at least 1 month, but the conceptus has been retained.

TREATMENT.—Place the patient on complete bed rest. If bleeding is severe, replace fluids and treat for shock. Analgesics may be administered to relieve pain. Administer antibiotics if signs of infection are present. Transfer the patient to a medical facility as soon as possible.

Sexual Assault/Rape

Sexual offenses, including rape, may be associated with serious injury, pregnancy, and sexually transmitted diseases and are criminal offenses. The medical management of sexual offenses must be a joint medicolegal function. The Medical Department representative (MDR) should ensure that the victim's commanding officer is notified. It is the responsibility of the command to contact NIS and the responsibility of the Medical Department to provide medical managment. BUMEDINST 6320.7 series, family Advocacy Program, provides guidelines on managing sexual offenses. The victim of a sexual assault should be referred immediately to the nearest NRMC or other fixed medical treatment facility when circumstances permit. When circumstances do not permit it (e.g., when at sea), the MDR must treat any injuries and obtain and safeguard evidence, as directed by NIS and instructed in the NIS Sexual Assault Investigative Kit. Reassurance and calm, efficient, sympathetic handling of the victim is essential. In all cases, refer the victim to a medical treatment facility as soon as possible for further treatment.

Common Breast Conditions

Usually afflictions of the breasts that will be brought to your attention may be referred to a physician for routine evaluation and treatment. The most commonly encountered breast conditions are contusions. These are best treated by using a breast binder for immobilization and support. Hot or cold compresses may help to alleviate the severity of pain. Breast infections and abscesses are rare in nonlactating women, but they do occur. Treat these conditions with antimicrobials. Refer patients with breast abscesses, lesions, lumps, or persistent pain and related symptoms for definitive treatment.

Although discussed earlier in this chapter, it would be appropriate to again stress that the cultivation of a professional, mature, sincere, and compassionate attitude by the hospital corpsman is essential. Medical ethics is stressed at all times and is indeed mandatory when treating patients, regardless of the sex.

DENTAL CARE

Ensuring that the entire crew is in good dental health before deployment will prevent most dental-related problems. Predeployment examinations are therefore very important.

In the absence of a dental officer aboard ship, you, the MDR, must perform basic emergency dental first aid to alleviate pain, arrest hemorrhage, and prevent further or complicating injury to dental structures that are associated with the most common oral conditions and injuries.

Only attempt to administer emergency basic dental care. You should refer all routine cases to a dental treatment facility, and refer all cases treated by nondental personnel for followup at the earliest opportunity.

DENTAL FUNDAMENTALS

Dental Terminology

Some knowledge of dental terminology is important to interpret emergency treatment plans prepared by dentists and to prepare consultation sheets for referral to a dental treatment facility. Make sure you use standard dental abbreviations when recording entries in a patient's dental record. These abbreviations are in MANMED 6-115.

Terms Explained

The following terms are defined as used in this section.

Abscess—a localized collection of pus in a cavity formed by disintergrating tissues in or about the tooth

Alveolar Bone—A thin layer of bone making up the bony processes of the maxilla and madible, and surrounding and containing the teeth. It is pierced by many small openings through which blood vessels, lymphatics, and nerve fibers pass.

Apical Foramen—an aperature at or near the apex of the root of a tooth, through which blood vessels and nerves supplying the pulp pass

Buccal—pertaining to or directed toward the cheek

Buccal Vestibule—the area between the cheeks and the teeth and gingivae

Cementum—the bonelike connective tissue covering the root of a tooth and assisting in tooth support

Cervix—the neck of the tooth

Crown—the portion of a tooth covered by enamel

Dentin—the chief hard tissue of the tooth; it surrounds the tooth pulp and is covered by enamel on the crown and by cementum on the root

Enamel—the white, compact, and very hard substance that covers and protects the dentin of the crown of a tooth

Eugenol—a colorless or pale yellow, oily liquid, obtained from oil of clove and other natural sources; used as a topical analegsic and antiseptic; and used in combination with zinc oxide as a sedative dressing in a tooth

Gingivae—the gums: the mucous membrane, with the supporting fibrous tissue, which overlies the alveolar bone and encircles the necks of the teeth

Gingival Sulcus—a furrow surrounding a tooth, bounded internally by the tooth surface and externally by the epithelium lining the free gingivae

Interdental Papilla—the triangular pad of gingival tissue filling the space between the proximal surfaces of two adjacent teeth

Mesial—nearer the center line of the dental arch

Necrotizing Ulcerative Gingivitis—trench mouth; an acute or chronic gingival infection characterized by redness and swelling, by necrosis extending from their interdental papillae along the gingival margins, and by pain, hemorrhage, and a necrotic odor

Occlusal—a term applied to the chewing surface of premolars and molars

Pericoronitis—inflammation of the gingiva surrounding the crown of a partially erupted or unerupted molar

Periodontal Ligament—a modified periosteum consisting of collagenous connective tissue fibers that connect the tooth to the alveolar bone

Periodontitis—an inflammatory reaction of the periodontium, usually resulting from the extension of gingival inflammation into the periodontium

Periodontium—the tissue that surrounds and supports the teeth

Scaling—the removal of calculus from the exposed tooth surfaces

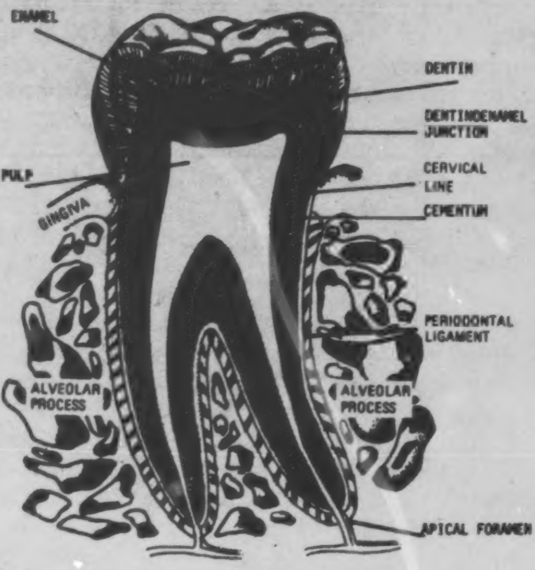
Varnish—a solution of rosin, of resin, or of several resins in a suitable solvent or solvents, applied to protect the pulp

DENTAL ANATOMY

When you refer a patient to a dentist, it will help if you can describe the specific location of the problem. To do that you must use the proper terms to describe the location, identification, and surfaces of the teeth. Since this does not occur frequently, we will not take space here to cover it. This information is available in detail in *Dental Assistant, Basic,* NAVEDTRA 10677.

DENTAL HISTOLOGY

Dental anatomy deals with the external form and appearance of the teeth. Dental histology studies the tissues and internal structure of the teeth, along with the tissues that surround and support them. A knowledge of dental histology will be helpful when you provide emergency dental treatment.



267.24

Figure 2-5.—The periodontium.

Tissues of the Teeth

Structurally, the teeth are composed of four different tissues: enamel, dentin, cementum, and pulp. They are shown in figure 2-5 and discussed below.

Enamel

Enamel is the calcified substance that covers the entire crown of the tooth. It is thickest at the cusps, thinning to a knife edge at the cervical line. It is formed only once and cannot regenerate or repair itself. Thus, when enamel is destroyed by decay, operative dentistry is required to reconstruct the tooth. Enamel has no nerve fibers and cannot register sensations.

Dentin

Dentin is the light yellow substance that makes up the bulk of the tooth. It is softer than enamel but harder than bone and is located inside the crown under the enamel. The point at which the dentin and the enamel meet is called the dentinoenamel junction. Dentin is also found inside the root of the tooth under the cementum. The inner surfaces of the dentin forms a hard-walled cavity that contains and protects the pulp.

Unlike enamel, dentin continues to form throughout the life of the tooth. When the dental pulp is mildly stimulated as a result of caries, cavity preparation, abrasion, attrition, or erosion, a protective layer of secondary dentin is formed on the pulp wall.

Even though dentin is not sensitive to stimuli, sensation may result when mechanical, thermal, or chemical stimuli are applied to it. The sensation comes not from the dentin itself but from cells that extend into it. These cells are actually part of the pulp, not the dentin, and they are sensitive to stimuli.

Cementum

Cementum is a bonelike substance, although it is not as hard as bone. It forms a protective layer over the root portion of the dentin. The cementum joins the enamel at the cervix of the tooth.

The main function of cementum is to anchor the tooth to the socket by attaching to the principal fibers of the periodontal ligament.

Cementum is formed continuously throughout the life of the tooth. Thus, it compensates for the loss of tooth substance due to wear by attaching new fibers of the periodontal ligament to the root.

Pulp

The pulp is soft tissue that fills the pulp cavity. This tissue contains numerous blood vessels and nerves that enter the tooth through the apical foramen. It is enclosed within the hard, unyielding dentin walls of the pulp cavity. The cavity has two parts: the pulp chamber and the root, or pulp canal. The chamber is located inside the crown. The canal is located inside the root.

An important function of the pulp is to form dentin. It provides the cells from which dentin is formed and supplies the dentin with blood.

Pulp responds to external stimuli, providing sensation to the tooth. It responds to irritation either by forming secondary dentin or by becoming inflamed. Since the walls of the pulp chamber and root canal permit no expansion of the pulp tissue, any inflammatory swelling of the tissue will compress the blood vessels against the walls. This results in a condition known as hyperemic pulp, which can lead to necrosis of the pulp tissue.

Tissues of the Periodontium

The tissues that surround and support the teeth are the cementum, the alveolar process, the periodontal ligament, and the gingivae. Collectively, these tissues are known as the periodontium. Throughout the following discussion, refer to figure 2-5.

Alveolar Process

The alveolar process is the portion of the maxillae and mandible that forms and supports the sockets (alveoli) of the teeth.

The alveolar process can be divided into two parts: the alveolar bone proper and the supporting alveolar bone. The alveolar bone proper is a thin layer of bone that lines the tooth socket and attaches the principal fibers of the periodontal ligament. The supporting alveolar bone is the portion of the alveolar process that surrounds the alveolar bone proper and gives support to the tooth socket.

Periodontal Ligament

The periodontal ligament consists of hundreds of tissue fibers that, except at the apical foramen, completely surround the tooth root. The ligament acts as a shock absorber, reducing the impact of the teeth as they occlude.

Gingivae

The gingivae are the soft tissue that covers the alveolar process and surrounds the necks of the teeth. They consist of an outer layer of epithelium and an inner layer of connective tissue.

Healthy gingivae are pink, firm, and resilient. They have a stippled appearance. Stippling refers to the "orange peel" texture of the healthy tissue. Inflammation causes a loss of stippling. When inflamed, the gingivae may become sore and swollen, and they may bleed.

ORAL EXAMINATION

Before performing an oral examination, review the patient's medical and dental history. Note any history of allergies, heart disease, and hepatitis. Note the medications the patient is currently taking. Review and update the patient's NAVMED 6600/3 as needed.

When you examine the oral cavity, use a thorough and systematic approach. Some knowledge of the normal dental anatomy is essential to recognize oral diseases. The starting point of the examination is determined by the individual performing it. However, the examination should include the entire orofacial region. The following approach is merely a suggested guideline. First, examine the patient's tongue and the floor of the mouth. Check for signs of ulceration, swelling, deviations in normal anatomy and appearance, and lack of papillae on the tongue. To properly visualize these areas, grasp the tongue with a 2 × 2 or 4 × 4 gauze pad, and move the tongue from side to side.

Next examine the buccal mucosa and vestibule areas for signs of ulceration, swelling, or sinus tracts. Examine the hard and soft palates, gingivae, and alveolar mucosa. Record any deviations from normal. Palpate the patient's submental, submaxillary, and tonsillar lymph nodes, and record any palpable nodes and whether they are tender, fixed, or mobile.

Using a mirror and an explorer, examine the teeth for caries, chips or fractures, faulty restorations, and other anomalies. Use the mirror and a periodontal probe to check the periodontium for depth of the periodontal sulcus around the teeth. A depth in excess of 3 mm is indicative of periodontal disease, especially if bleeding accompanies gentle probing.

You must now evaluate the chief compaint that brought the patient to seek treatment. If the complaint is a fractured restoration, the exposed dentin may be sensitive to thermal changes, or the sharp edges may irritate the tongue. If the problem is a painful carious lesion, determine the status of the pulp. This is done by percussion in which a painful response may indicate periapical pathology. Sensitivity to heat or cold may indicate pulpal changes, which may be the result of caries, trauma, a new restoration, or a fractured tooth. If pain persists after the stimulus is removed, the pulpal tissue is probably seriously damaged and undergoing degenerative changes.

If the chief complaint is a periodontal problem, evaluate the color, contour, and uniformity of the gingivae. Hemorrhage upon probing indicates periodontal disease. The pain may be related to a pus-filled, fluctuant periodontal abscess. The teeth may be mobile as a result of advanced bone loss or trauma from a recently placed high restoration.

LOCAL ANESTHESIA

Most emergency dental procedures may be performed without the use of anesthetics. Incising and draining a well-localized soft tissue abscess with a single stab incision, opening the pulp chamber of a painful nonvital tooth, or placing a temporary filling in a carious tooth can usually be performed without a local anesthetic. Often it is disadvantageous to use an anesthetic. For example, if an anesthetic is used when excavating and filling a large carious lesion, you must wait for the anesthesia to wear off before determining whether or not the restoration has eliminated the pain. Placing a temporary sedative filling will usually bring relief without using anesthesia.

Placing a dressing on an exposed vital pulp may require an anesthetic. However, in this case profound anesthesia may not make this procedure pain free. Extensive manipulation of painful tissues, such as irrigation and debridement of an acute pericoronitis, will be more tolerable when you administer an anesthetic. You, the independent duty hospital corpsman, and the patient must decide whether to use an anesthetic.

Pain is perceived differently by patients. One patient may perceive pain as minimal, while another will describe it as excruciating. Fear and anxiety increases the patient's perception of pain. It is up to you to reassure the patient to help alleviate this problem.

The problems involved in anesthetizing the mandibular arch are different from those involved in anesthetizing the maxillary arch. In the maxillary arch, most teeth can be effectively anesthetized by injecting 2 ml of anesthetic solution in the loose tissue just above the tooth. It is important to penetrate the loose oral mucosa above the lighter pink attached gingiva that is immediately adjacent to the teeth. The attached gingiva and the similarly attached tissues of the palate are denser and more difficult and more painful to penetrate. The needle should not penetrate the mucosa more than 5 to 6 mm to approximate the apex of the root of the tooth. Make sure the needle point does not contact the bone.

Local anesthesia of the maxilla will diffuse readily through the periosteum and bone to the nerves supplying the teeth, but the greater density of the cortical bone in the mandible makes diffusion more difficult. Some lower front teeth may be anesthetized by an infiltration injection, but the lower posterior teeth will generally require nerve block anesthesia. Techniques for the administration of nerve block anesthesia are described in the *Cooke-Waite Manual of Local Anesthesia.*

Before administering an intraoral injection, wipe the injection site free of saliva and debris. Swab the area with a Betadine sponge. Whenever possible, avoid multiple injections in the oral cavity. By carefully analyzing the location of the teeth you want to anesthetize, you will normally be able to block the area with a single injection.

Place the patient in a recumbent or supine position for the injection. Reassure the patient about the procedure to help calm him or her and to avoid syncope. Never leave a patient alone following an injection. Do not inject into an area of swelling and inflammation. When swelling or other indication of soft tissue inflammation exists, the nerve may be blocked central to the area of inflammation.

The most commonly use anesthetic for dental injections is lidocaine (HCL) or Xylocaine® in a 2% aqueous solution. Xylocaine with 1:100,000 epinephrine may be used to prolong the anesthetic effect. Use a 23- to 27-gauge 1-inch needle for all infiltration injections; however, a 23- to 25-gauge 1 5/8-inch needle may be required for some regional blocks.

Xylocaine is a relatively nontoxic preparation. The maximum safe dose for an adult is 300 mg. Toxic reactions may be the result of either exceeding the maximum safe dose or injecting the anesthetic intravenously faster than the body can detoxify it. Always remember to aspirate before injecting the anesthetic. A toxic reaction to Xylocaine may have a brief excitatory stage followed by depression or may simply be evidenced by respiratory and cardiac depression. Cerebral anoxia may precipitate convulsions. Most toxic reactions are mild and transitory. Place the patient in a supine position, and ensure a clear airway and adequate oxygen. Support the respiratory and cardiac functions until the body can detoxify the drug, thus ending the reaction. Unless an extreme overdose has been administered, the reaction will be brief and transitory and require no medications. Other possible reactions to look for when administering intraoral injections are hematomas, blanching of the skin, temporary paralysis of facial muscles, and sometimes loss of eye control and temporary blindness. These reactions will usually disappear as the drug is detoxified by the body.

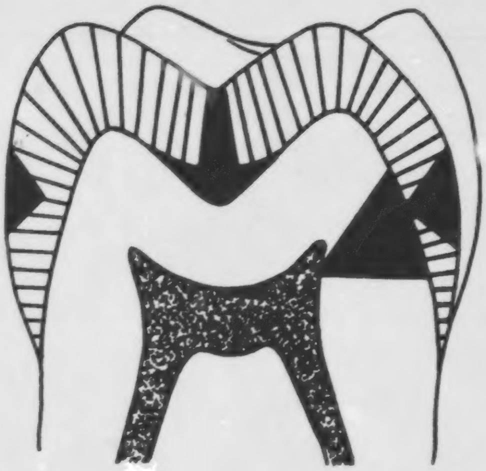
ORAL DISEASES AND INJURIES

As is true of all diseases and injuries, the symptoms discussed here refer to what the patient describes and the signs pertain to what you observe.

Dental Caries

This is the most widespread chronic disease of mankind. The most common cause of dental caries is bacterial plaque. The plaque on a tooth gives bacteria a place to breed. These bacteria release acids and other toxins that attack tooth enamel. This produces carious lesions (cavities).

Dental caries destroys tooth tissues. Caries begins in the enamel. Usually, it first appears as a chalky white spot on the enamel. It may stop there, but if it does not, it goes through the enamel and into the dentin. As the caries goes farther into the dentin, the tooth pulp may be affected. Figure 2-6 shows how caries progresses into the tooth. If the pulp cannot resist the irritation caused by the caries, it will die.



267.48

Figure 2-6.—The progress of caries: Caries in the enamel (left); caries going through the enamel and into the dentin (top); caries spreading along the dentinoenamel junction and going through the dentin to involve the pulp (right).

SYMPTOMS.—The patient may complain that the affected tooth is sensitive to heat and cold (usually cold), to sweets, or to pressure from food particles impacted in the cavity.

Sometimes a patient will point to a healthy tooth and complain that it aches. There may be trouble in such a tooth, but it is always advisable to examine the other teeth on the same side (both upper and lower arches) for a cavity. This may be referred pain; that is, a patient feels pain in a healthy tooth while the true cause of the pain is located elsewhere.

SIGNS.—Examine the patient for caries by using a mouth mirror, an explorer, a cotton forceps, and a spoon excavator. Locate the affected tooth by asking the patient to point to it. You may observe some of the following signs.

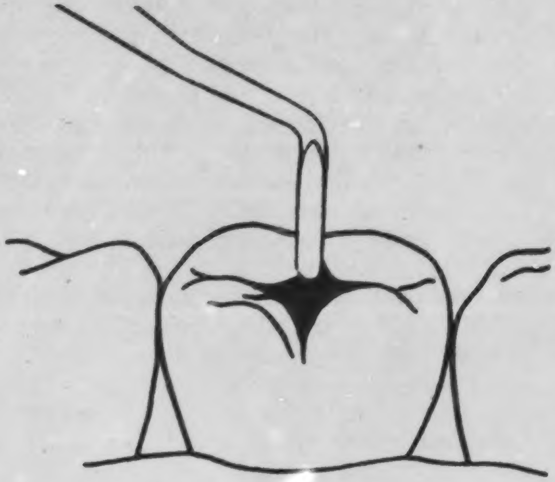
- Chalky white spot on tooth surface
- Surface roughness when explorer point passes lightly over tooth
- Dark, stained cavity
- Cavity filled with spongy mass of decaying dentin

Find out the depth of the caries. To do this, you may have to remove loose debris from the cavity. Use the spoon excavator and very gently lift out the debris as illustrated in figure 2-7. NOTE: Never try to scrape or dig the debris from the interior of the tooth.

Stop the examination if there is bleeding in the pulp area, if the pulp is exposed, or if the patient's pain is greatly increased.

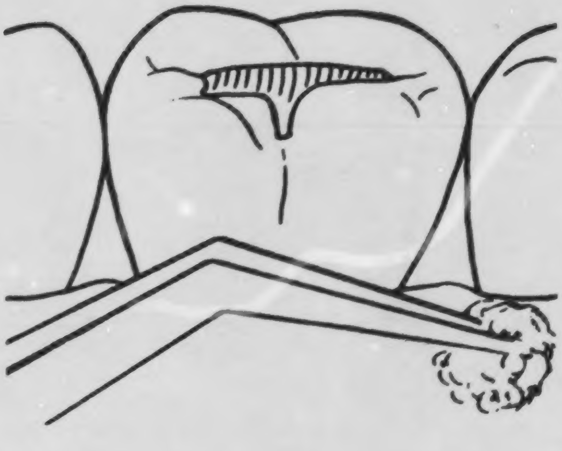
If there is no pulpal bleeding or exposure or increased pain, continue removing the debris. When all of it is removed, lightly dry the interior of the tooth with a cotton pellet as shown in figure 2-8. Do not use air or extreme pressure in drying the tooth.

TREATMENT.—The following is a treatment plan for a tooth with no pulpal opening. For a tooth with a pulpal opening, see the treatment plan for acute pulpitis.



267.49

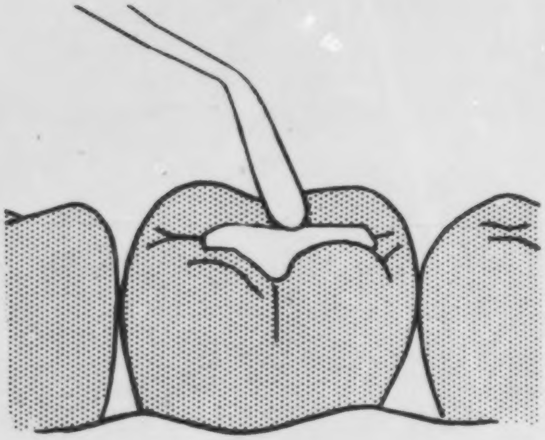
Figure 2-7.—Removing debris from the cavity.



267.50

Figure 2-8.—Preparing to dry the cavity.

If you have not done so before, remove all debris from the cavity with an excavator, and flush the cavity with warm water. Isolate the tooth with cotton rolls to free the cavity of saliva. If the tooth is in the mandibular arch, cotton roll holders will be helpful in isolating it. You can easily isolate a tooth in the maxillary arch by placing cotton rolls between the arch and the cheek or lip, depending upon the location of the cavity. Carefully dry the interior of the cavity with clean cotton pellets. Mix a zinc oxide-eugenol (ZOE) temporary filling, following the instructions on the kit. Use a Woodson No. 2 or 3 plastic instrument to place the filling in the cavity as illustrated in figure 2-9. Do not pack the cavity. Do not exert pressure on the filling; however, be sure the cavity is sealed off from the saliva. Smooth the filling with a cotton pellet dipped in water, so the filling does not keep the patient from closing the teeth together. Tell the patient not to chew solids for 2 hours, then to chew on the opposite side of the mouth until seen by a dentist. Stress the temporary nature of the treatment.



267.52

Figure 2-9.—Placing the temporary filling.

Acute Pulpitis

Acute pulpitis is a severe inflammation of the tooth pulp. Usually, it is the result of dental caries. It is the most frequent cause of severe dental pain. The pain is caused by the pressure of fluids building up inside the pulp chamber or the root canal(s).

SYMPTOMS.—The patient may present with a continuous, piercing, and pulsating pain in the affected area; an increase of pain upon lying down; an increase or decrease of pain when the tooth is exposed to heat or cold; or an increase of pain when pressure is applied to the tooth.

SIGNS.—You may see a large cavity with or without a pulpal opening, blood or pus oozing from an opening, or swollen gingival tissue near the affected tooth. A painful reaction may occur when pressure is applied to the tooth by pressing the exterior of the tooth lightly with a finger or an instrument.

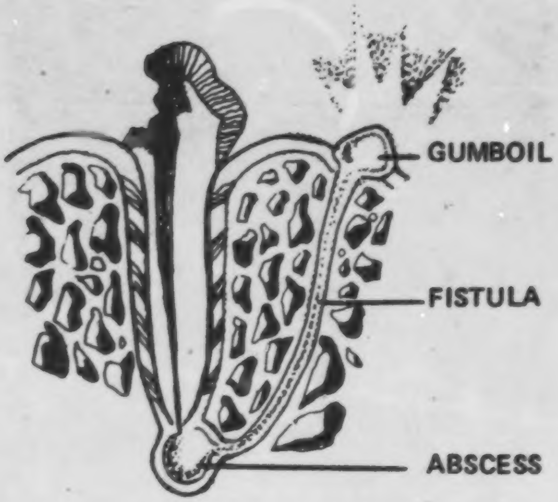
TREATMENT.—Gently remove loose debris from the cavity with a spoon excavator, being careful not to touch the pulpal opening. Dry the cavity very gently with a cotton pellet. Remove enough cotton fibers from a cotton pellet to make a smaller pellet. Slightly moisten the smaller pellet with a small amount of eugenol, and then blot the pellet on a gauze pad. NOTE: Excess eugenol can harm the tooth pulp. Place the pellet moistened with eugenol in the cavity, and cover the pellet with a dry cotton pellet.

Tell the patient that the treatment is temporary and may have to be repeated during the night. Give analgesics for pain, and refer the patient to a dentist as soon as possible.

Periapical Abscess

A periapical abscess usually results from an infection of the tooth pulp. Therefore, the abscess often develops as a result of unchecked pulpitis. Infection of the tooth pulp causes fluids to build up within the walls of the pulp chamber and root canal(s). A periapical abscess is formed when these fluids escape from the interior of the tooth through the apex of a root canal. The escaping fluids create a fistula in the soft tissue. When the fluids reach a soft tissue drainage site, they form a large swelling called a parulis, or gumboil, as shown in figures 2-10 and 2-11.

SYMPTOMS.—The patient may complain of a constant, throbbing pain in the affected area and an increase of pain when chewing or



267.53

Figure 2-10.—Periapical abscess.

267.54

Figure 2-11.—Gumboil caused by a periapical abscess.

lying down. The complaint may also include a bad taste, a tooth that feels longer than the others, or a gumboil.

SIGNS.—You may cause severe pain when applying finger pressure to the affected tooth or when you tap the tooth lightly with the end of an instrument. You may see swelling or a gumboil on the soft tissues and facial swelling near the affected area. You may also discover the tooth is loose, and the patient may have an elevated temperature.

TREATMENT.—Drain the abscess to relieve the pressure, which will cause the pain to disappear. If a carious lesion is present in the affected tooth, use an excavator and gently remove the debris from the lesion. If this exposes the tooth pulp, drainage will result, and the pain will disappear. NOTE: Do not dig or gouge through the caries to reach the pulp.

If drainage does not result when debris is removed, have the patient rinse with warm saline for 10 minutes every 2 hours. This may result in forming a gumboil for drainage to pass through. The method is also reliable if a gumboil is present when the patient reports for treatment. NOTE: Never apply heat to the face because it may cause drainage through the face rather than the abscess.

As a last resort, if drainage does not result from the two methods already mentioned, apply ice packs to the affected area. They can be safely applied to the external surfaces of the face and will reduce the patient's discomfort until proper treatment can be given.

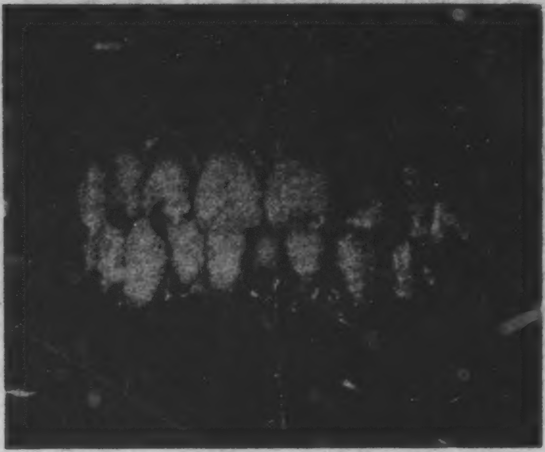
Marginal Gingivitis

Gingivitis is an inflammation of the gingival tissue as illustrated in figure 2-12. In marginal gingivitis, the inflammation is relatively mild and is sometimes localized, existing around one, two, or several teeth. The most frequent cause of marginal gingivitis is poor oral hygiene.

SYMPTOMS.—The patient most likely will present with sore, swollen, bleeding gums.

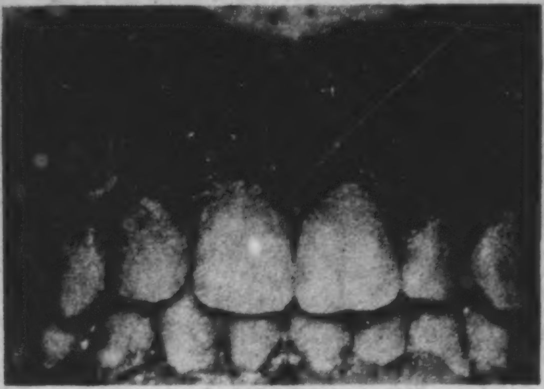
SIGNS.—You may notice a painful reaction or gingival bleeding when you apply finger pressure to the affected area. You may also see a red, swollen gingiva with a loss of stippling; cuts or abrasions on the gingivae; and heavy plaque and calculous deposits in the affected area.

TREATMENT.—Give the patient plaque control instruction as explained in NAVEDTRA 10677, and refer to a dental treatment facility for scaling and polishing.



267.55

Figure 2-12.—Marginal gingivitis.



267.56

Figure 2-13.—Necrotizing ulcerative gingivitis.

Necrotizing Ulcerative Gingivitis (NUG)

This is a severe inflammation of the gingival tissue. See figure 2-13. Sometimes NUG is called by the more common name—trench mouth. It may result from untreated marginal gingivitis. Other factors that contribute to NUG include poor oral hygiene and dietary habits, excessive smoking or alcohol consumption, and poor physical condition of the patient. NUG is not contagious.

SYMPTOMS.—The symptoms are the same as those of marginal gingivitis. In addition, the patient may complain of a bad taste and pain when eating or brushing.

SIGNS.—The signs are similar to those for marginal gingivitis, but they will probably be more severe. For example, there may be more bleeding, and the patient may feel more pain when finger pressure is applied to the affected area. Also, calculous and plaque deposits may be greater. The following are signs associated with NUG that are not normally present with marginal gingivitis.

The most characteristic sign of NUG is ulceration and cratering of the interdental papillae. Frequently, so much of a papilla is lost that the triangular area between the crowns of the teeth presents a "punched out" appearance. In addition, you may detect the following.

- Gray-white membrane covering the gingivae
- Foul odor from the oral cavity
- Pus oozing from the gingivae
- Areas of gingival recession
- Elevated temperature

TREATMENT.—Treat NUG in the same way as marginal gingivitis, but referral to a dental treatment facility is more important than in marginal gingivitis.

Periodontitis

This is an inflammatory condition that involves the gingivae, the crest of the alveolar bone, and the periodontal membrane above the alveolar crest as shown in figure 2-14. It usually develops as a result of untreated marginal gingivitis. The disease is marked by a gradual recession of the periodontal tissues. Tooth mobility may also occur. Periodontitis may affect the entire dentition or only localized areas.

267.57

Figure 2-14.—Periodontitis.

SYMPTOMS.—The patient may complain of any of the following.

- Deep, gnawing pain in the affected area
- Itchiness of the gums
- Sensitivity to heat and cold
- Bad taste
- Bleeding gums
- Food sticking between the teeth
- Toothache (in the absence of caries)
- Increased spacing between anterior teeth
- Loose or elongated teeth
- Uneven bite

SIGNS.—Examination will reveal any or all of the following.

- Heavy plaque and calculous deposits
- Gingival inflammation, bleeding, or bluish-red discoloration
- Local or general gingival recession
- Ulcerated or destroyed interdental papillae
- Tooth mobility

TREATMENT.—The emergency treatment for periodontitis is the same as for marginal gingivitis and NUG.

Periodontal Abscess

A periodontal abscess is caused by an infection in the periodontal tissues. This infection is usually the result of long-continued irritation by food debris; deep deposits of calculus; or a foreign object such as a toothbrush bristle or a popcorn husk being tightly packed into the interproximal spaces or between the tooth and the soft tissues.

SYMPTOMS AND SIGNS.—The symptoms and signs for periodontal abscesses are similar to those for periapical abscesses.

TREATMENT.—Gently probe the affected area with a scaler or a periodontal probe to establish drainage. Probe the space between the tooth surface and the soft tissue.

If probing fails to start drainage, apply warm saline soaks to the affected area. NOTE: Never apply soaks to the face because they may cause drainage through the face rather than the abscess.

Pericoronitis

This is an inflammation of the gingiva around a partially erupted tooth. When a tooth begins to erupt, breaking through the gingival tissue, a small flap of tissue may remain over the tooth surface. Debris can accumulate beneath the tissue flap, and if the patient is unable to keep the area properly cleansed, inflammation can result. It can also result from constant contact between the tissue flap and a tooth in the opposing arch.

Pericoronitis most often affects mandibular third molars, though any erupting tooth may be involved. The condition often occurs in the 18-to 25-year age group. Because many Navy personnel are in this age group, pericoronitis is one of the most frequent periodontal emergencies encountered.

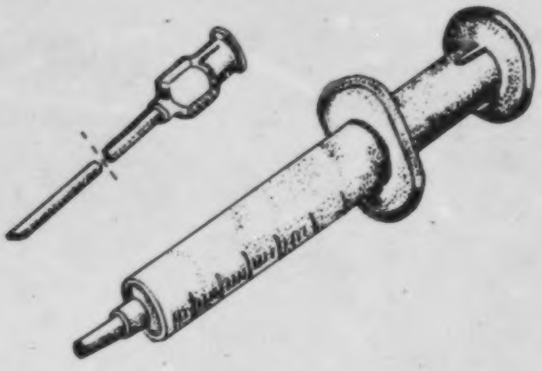
SYMPTOMS.—A patient's symptoms can include the following.

- Pain when chewing
- Bad taste
- Difficulty in opening the mouth
- Swelling in the neck or in the area of the affected tooth
- Sore neck or throat
- Elevated temperature

SIGNS.—Your examination may reveal the following.

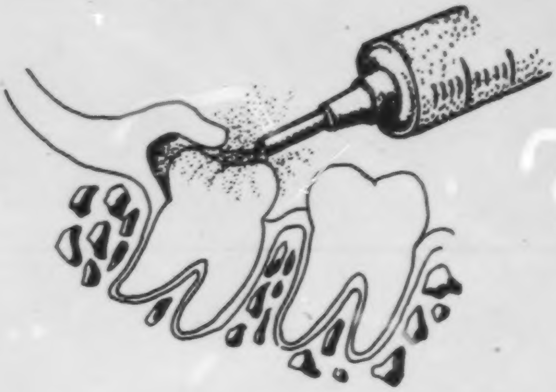
- Partially erupted tooth
- Red, inflamed tissue around a partially erupted tooth
- Pus oozing from under an overlying tissue flap
- Painful reaction when finger pressure is applied to affected tissue
- Swelling in the cheek near the affected area
- Enlarged lymph nodes under the mandible or on the side of the neck
- Elevated temperature

TREATMENT.—Irrigate the undersurface of the tissue flap and the surrounding area with warm saline. Use a 5-ml Luer-Lok syringe with a blunted 18-gauge needle. Figure 2-15 shows how to blunt the needle, and figure 2-16 shows the proper irrigating technique.



267.58

Figure 2-15.—Blunting the needle.



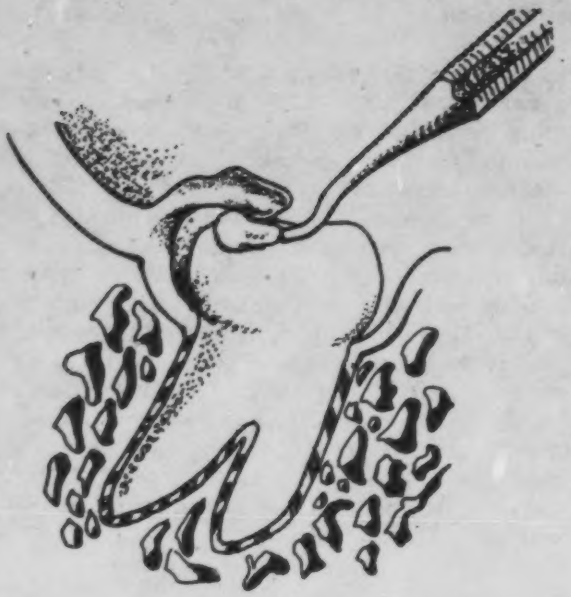
267.59

Figure 2-16.—Irrigating beneath the tissue flap.

Wrap a spoon excavator with a portion of a cotton pellet. Place a small amount of glycerite of iodine on the pellet, and wipe the pellet gently under the flap. See figure 2-17. Instruct the patient to rinse with warm saline every 2 hours.

Stomatitis and Recurrent Labial Herpes

Stomatitis is an inflammation of the oral mucosa. Two types of stomatitis commonly



267.60

Figure 2-17.—Applying glycerite of iodine.

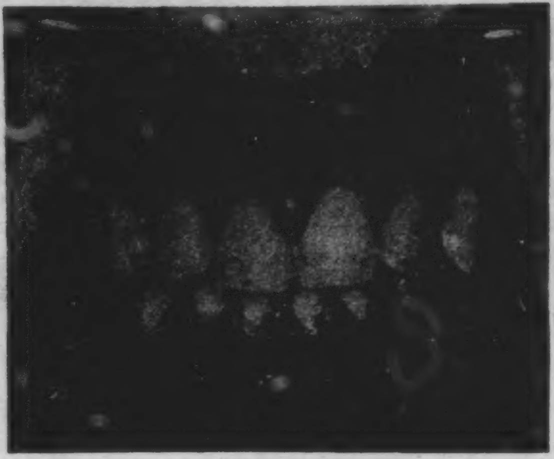
encountered are herpetic gingivostomatitis and aphthous stomatitis. Both conditions are marked by the formation of small blisters and ulcers on the oral mucosa as illustrated in figures 2-18 and 2-19.

Recurrent labial herpes is an infection that produces a fever blister or cold sore. Such a lesion is usually found on the lip as shown in figure 2-20.

NOTE: Some oral lesions are caused by an infectious disease; therefore, wear rubber gloves when examining the patient.

SYMPTOMS.—The patient may complain of painful swelling; a fever blister, cold sore, or canker sore; a great amount of pain when eating or drinking; and a fever, a headache, or run-down feeling (herpetic gingivostomatitis).

SIGNS.—Your examination may show red, swollen areas with blisters or small craters formed in the centers, or these lesions covered with grayish-white or yellowish membrane.



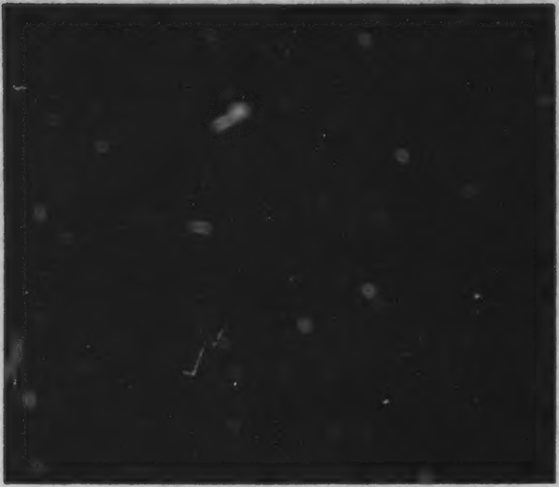
267.61

Figure 2-18.—Herpetic gingivostomatis.

267.62

Figure 2-19.—Aphthous stomatitis.

TREATMENT.—Since these conditions will normally disappear spontaneously within 7 to 10 days, measures to eliminate the patient's discomfort are all that is necessary. Have the patient rinse with a warm solution of sodium bicarbonate several times daily. Treat stubborn recurrent cases by encouraging the patient to hold 1 teaspoon of tetracycline oral suspension in the mouth for 2 minutes 4 times daily for 5 days.



267.63

Figure 2-20.—Recurrent labial herpes.

Symptomatic relief may be obtained from anesthetic troches, ointments, or solutions such as an anesthetic mouth rinse. Also, tell the patient not to smoke; eat hot, spicy, or acidic foods; or drink alcoholic beverages.

Postexodontic Hemorrhage

This condition may occur any time from a few hours to several days after the tooth extraction. The bleeding from the extraction site may be light or heavy. Treat all abnormal postextraction bleeding as serious.

SYMPTOMS.—The patient may say that bleeding started or failed to stop after an extraction and that he or she is swallowing or spitting out large amounts of blood and feels weak from blood loss. A patient may also complain of a large amount of blood on bed clothing after sleeping; however, a small amount of blood in the saliva is normal after extraction.

SIGNS.—These include blood oozing or flowing from a recent extraction site after normal clotting should have occurred and a large amount of blood or large blood clots in the patient's mouth or on the clothing.

TREATMENT.—Initial attempts at controlling the hemorrhage should be directed at removing any clot in the mouth extraneous to the alveolus. Place a tightly folded 4×4 gauze pad or tea bag over the wound site, and have the patient bite firmly for 15 to 20 minutes. Keep the mouth as dry as possible, and encourage the patient to breathe through the mouth because this will help keep it dry.

If the above efforts do no control the hemorrhage, and if the bleeding appears to be coming directly from the alveolus, dry the alveolus, pack it with Surgicel® or Gelfoam®, and place a gauze pad as a pressure dressing over the wound site. Have the patient bite down for 15 to 20 minutes. Refer the patient to a dental treatment facility if the hemorrhage continues. Occasionally, postextraction hemorrhage occurs 3 to 5 days following the extraction. In general, follow the same treatment procedures for hemorrhage within the first 24 hours.

Postexodontic Osteitis

This condition, also known as dry socket, results when a normal clot fails to form in the socket of a recently extracted tooth. Since this condition is usually very painful, always consider it a serious emergency.

SYMPTOMS.—A patient presenting with a dry socket will usually have a history of extraction within 5 days; a complaint of excruciating, constant pain; and the loss of a blood clot or the failure of a clot to form.

SIGNS.—Upon examination, you will probably note the absence of a blood clot in the socket of a recently extracted tooth; however, the socket may contain food debris. Alveolar bone may be visible in the socket, and you may smell foul breath. The patient's temperature is probably elevated.

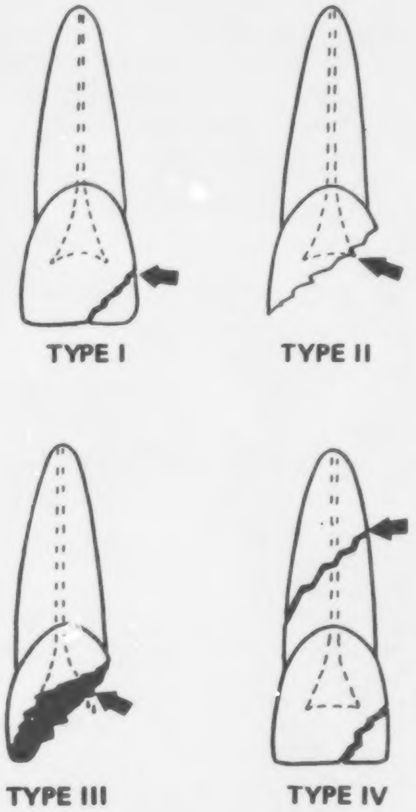
TREATMENT.—Gently rinse the socket with warm saline. Moisten a small strip of surgical gauze with eugenol, and press the gauze between two dry gauze pads to remove excess moisture. Place a strip of surgical gauze loosely in the socket. Do not exert pressure on the socket when placing the strip. Have the patient return daily. Clean the socket and change the dressing until the condition is corrected.

Fractured Teeth

Pain in fractured teeth usually results from the irritation of the pulp tissue. The primary goal is to lessen the pain and, if possible, prevent further injury while awaiting treatment by a dentist.

There are four different types of tooth fractures.

- Type I—This is a slight chip fracture of the tooth enamel as illustrated in figure 2-21. The pulp is not exposed. The tooth may be sensitive to heat or cold.



267.64

Figure 2-21.—Types of tooth fractures.

TREATMENT.—Smooth sharp edges of the chipped area with sandpaper strips to eliminate irritation of the tongue and lips. Apply small amounts of cavity varnish over the chipped area. Tell the patient not to take extremely hot or cold foods and liquids since this may damage the tooth pulp and be very painful.

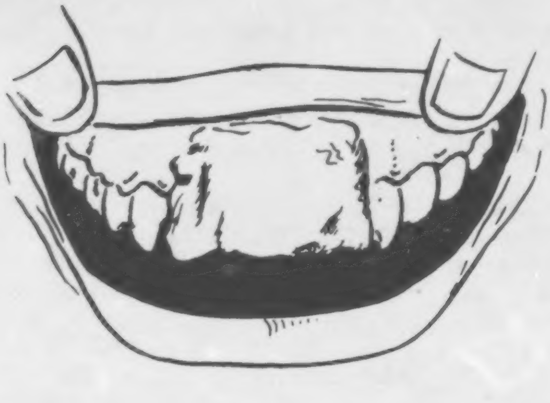
- Type II—This is a fracture with slight exposure of the pulp (fig. 2-21). It is a more serious fracture than type I. The patient experiences severe pain from thermal changes in the affected tooth.

TREATMENT.—Select a plastic crown form, and trim it with scissors to adapt it to the fractured crown. Place two or three small holes in the incisal edge of the crown form with a sharp, clean needle or pin. Fill the crown form with a thin mix of calcium hydroxide or ZOE. Gently place the crown form over the fractured crown. Remove excess moisture from the crown form with gauze and cotton pellets. Tell the patient to eat a diet consisting of soft foods and to avoid extremely hot or cold foods and liquids and sticky foods.

- Type III—This is a large fracture with much pulp exposure, such as when the entire crown of the tooth is broken off (fig 2-21). The pain is severe and mastication of food is almost impossible.

TREATMENT.—Place a crown over the affected tooth as explained in the treatment of type II fractures. It may be impossible to place a crown form over the fractured tooth because the pressure of the crown against the pulp tissue may cause pain. If this happens, place a splint rather than a crown form on the tooth.

Make the splint by preparing a large mixture of ZOE, and add cotton fibers from a cotton pellet for strength. Place the splint so that it covers the affected tooth and the teeth immediately adjacent to it. See figure 2-22. Place the mixture well up on the lingual and facial aspects of the gingival tissue. Gently compress the splint between your finger and thumb to lock it into the interproximal spaces. Trim the splint from the incisal edges of the teeth so the patient's occlusion is normal.



267.65

Figure 2-22.—Properly placed splint.

Advise the patient to let the splint harden for several hours before attempting to eat (see food restrictions under type II). Refer the patient to a dentist as soon as possible.

- Type IV—This is a fracture of the root, which may be further complicated by a fracture of the crown (fig 2-21). The pain is severe, mastication is almost impossible, and there may be a great deal of tooth mobility. Radiographic diagnosis is often the only sure way to determine a type IV fracture. However, any mobile tooth with a very recent history of trauma should be treated as a type IV fracture.

TREATMENT.--Place a splint in the same way as for a type III fracture.

Traumatically Extracted Teeth

Occasionally, a patient may report with a tooth that has been knocked out of the socket. When this happens, immediately place the tooth in sterile saline, and send it along with the patient to a dentist. If a dentist is not available, attempt to replace the tooth in the socket and stabilize it. If there is no root or alveolar fracture, anterior teeth often slip back into the socket very easily.

DENTAL RECORDS AND FORMS

A working knowledge of the dental records and forms used in the Navy is essential for you to correctly use and understand their purpose.

A DD 722-1, Dental Folder, is prepared for every individual on active duty in the Navy and Marine Corps. It will contain SF 603, Dental, and NAVMED 6600/4, Navy Periodontal Screening Examination (NPSE), that are filed on the right side in top to bottom sequence. The left side will contain the sequential bitewing radiographic mount; panographic or full mouth radiographs; NAVMED 6600/3, Dental Health Questionnaire; and DD 2005, Privacy Act Statement. These forms will also be filed in top to bottom sequence.

DD 722-1 is similar to DD 722, Health Record, in appearance. The outside front of DD 722-1 should have the patient's name, SSN, and date of birth on the upper edge. The patient's dental classification will be designated on the tab of the dental folder by placing a color-coded strip of tape over the word "FORM."

White tape indicates a Dental Class 1—No pathological oral conditions requiring treatment other than routine preventive measures.

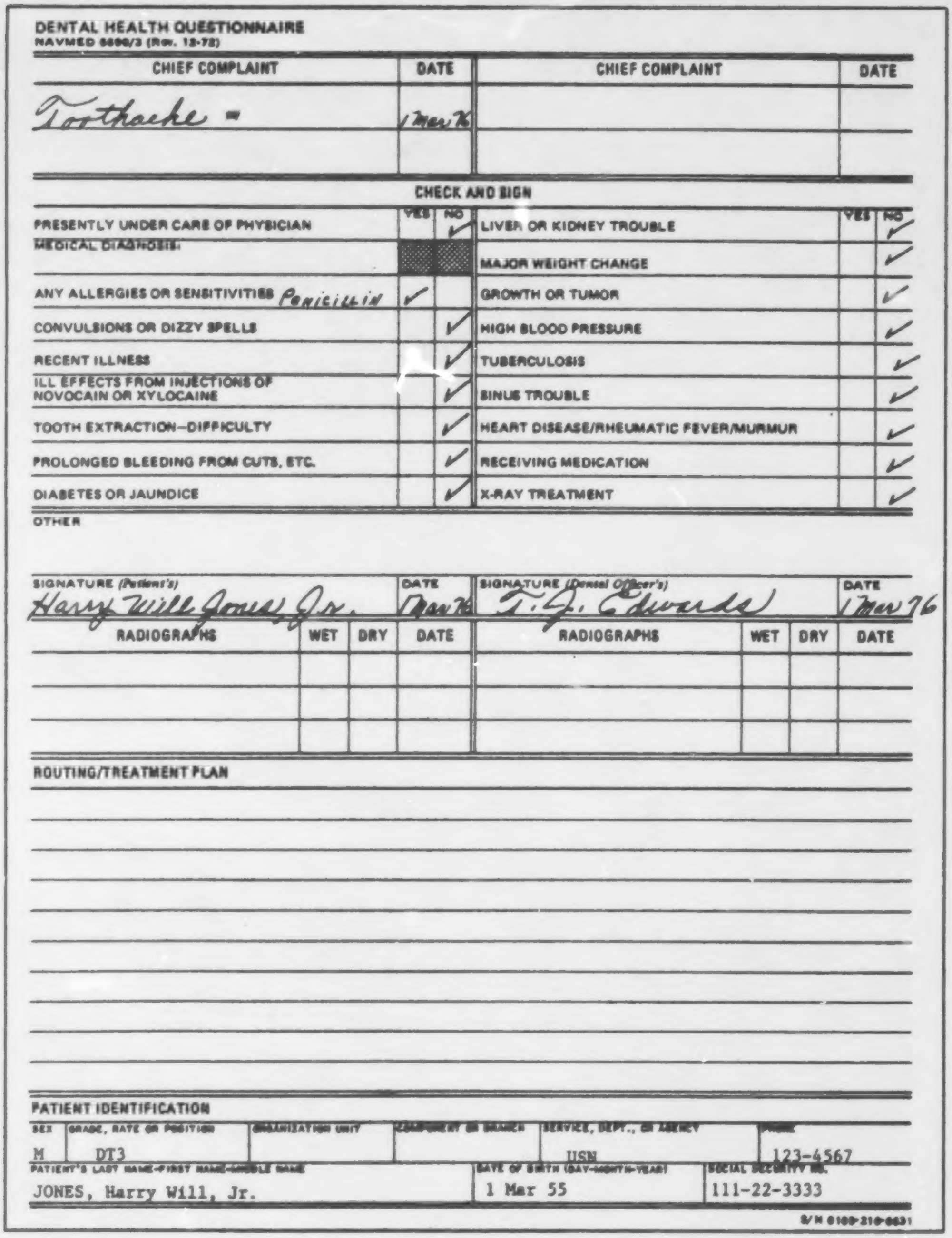
Green tape indicates a Dental Class 2—Minor pathological conditions exist that require only routine or elective treatment measures. These treatments may be postponed up to 6 months.

Yellow tape indicates a Dental Class 3—Existence of pathological conditions requiring early treatment measures.

Red tape indicates a Dental Class 4—Unknown oral classification because the patient has not received a dental examination in the past 12 months or the patient's dental record has been lost.

The dental record is verified when an individual reports to a new command and once a year thereafter. The verification information is stamped on the front of DD 722-1. The individual's duty station is entered on the designated space on the front of the dental record to facilitate the return of lost or misplaced records.

SF 603 is an aid to diagnosis, treatment, planning, and practice management. It is a means of identification and a record of the



DENTAL HEALTH QUESTIONNAIRE
NAVMED 6600/3 (Rev. 12-72)

CHIEF COMPLAINT	DATE	CHIEF COMPLAINT	DATE
Toothache –	1 Mar 76		

CHECK AND SIGN

	YES	NO		YES	NO
PRESENTLY UNDER CARE OF PHYSICIAN		✓	LIVER OR KIDNEY TROUBLE		✓
MEDICAL DIAGNOSIS:	▨	▨	MAJOR WEIGHT CHANGE		✓
ANY ALLERGIES OR SENSITIVITIES Penicillin	✓		GROWTH OR TUMOR		✓
CONVULSIONS OR DIZZY SPELLS		✓	HIGH BLOOD PRESSURE		✓
RECENT ILLNESS		✓	TUBERCULOSIS		✓
ILL EFFECTS FROM INJECTIONS OF NOVOCAIN OR XYLOCAINE		✓	SINUS TROUBLE		✓
TOOTH EXTRACTION—DIFFICULTY		✓	HEART DISEASE/RHEUMATIC FEVER/MURMUR		✓
PROLONGED BLEEDING FROM CUTS, ETC.		✓	RECEIVING MEDICATION		✓
DIABETES OR JAUNDICE		✓	X-RAY TREATMENT		✓

OTHER

SIGNATURE *(Patient's)*	DATE	SIGNATURE *(Dental Officer's)*	DATE
Harry Will Jones, Jr.	1 Mar 76	T. J. Edwards	1 Mar 76

RADIOGRAPHS	WET	DRY	DATE	RADIOGRAPHS	WET	DRY	DATE

ROUTING/TREATMENT PLAN

PATIENT IDENTIFICATION

SEX	GRADE, RATE OR POSITION	ORGANIZATION UNIT	COMPONENT OR BRANCH	SERVICE, DEPT., OR AGENCY	PHONE
M	DT3			USN	123-4567

PATIENT'S LAST NAME—FIRST NAME—MIDDLE NAME	DATE OF BIRTH (DAY-MONTH-YEAR)	SOCIAL SECURITY NO.
JONES, Harry Will, Jr.	1 Mar 55	111-22-3333

S/N 0105-210-6631

267.32

Figure 2-23.—Dental Health Questionnaire, NAVMED 6600/3.

initial examination showing missing teeth, existing restorations, diseases, and other abnormalities. It is also a record of diseases and abnormalities occuring after the initial examination; a chronological record of dental care; and a basis for dental statistical information. It will be prepared for all members of the Navy and Marine Corps as directed by MANMED. SF 603-A is the Dental-Continuation Sheet.

NAVMED 6600/3, shown in figure 2-23, is a self-explanatory form. The first part is used to record the patient's chief complaint. The second is the Check and Sign section and is normally completed by the patient. It is a simplified statement of the patient's medical history. All positive responses require explanation, especially the items for "any allergies or sensitivities," "ill effects from injections of Novocain or Xylocaine," and "heart disease/rheumatic fever/murmur," which will be recorded on SF 603; DD 722-1; SF 600, Chronological Record of Medical Care; and SF 601, Immunization Record. You must make sure the responses are marked in red in prominent letters across the front of DD 722-1 and across the top of SF 603. The third portion of NAVMED 6600/3 is used to record dental radiographs. The fourth portion is the Routing/Treatment Plan and is used to consult with other medical and dental personnel in the facility and to plan a course of examination leading to a diagnosis. The Patient Identification section must be completely filled out and updated as necessary.

CHAPTER 3

DIET THERAPY

This chapter is concerned with the nutritional requirements for the healthy and for the sick, wounded, and convalescing patient. Research has proved that good health depends upon essential elements that the body needs throughout life. The well-nourished individual is usually mentally alert, is at a maximum of physical capability, and has a high resistance to disease. The daily basic minimum requirements must be continued and supplemented during periods of illness to meet changing needs of the body and its ability to use foods. Therefore, the diet is an important factor of the therapeutic plan for each patient.

FOOD CLASSIFICATION

Foods are substances from the animal, plant, and mineral kingdoms which, when taken into the body, yield heat and energy, build and renew tissues, and regulate the body processes and internal conditions. Foods are classified as proteins, fats, carbohydrates, minerals, vitamins, and water.

PROTEINS

Proteins are important nutritive elements required by man. They are found in both the animal and plant kingdoms. All proteins are composed of amino acids, some of which are absolutely essential to maintain life. Others are necessary for repair, growth, and body development. Proteins, which promote tissue growth and renewal, have long been recognized as the main structural unit of all living cells. Each gram (g) of protein yields 4 calories in the process of metabolism. (If sufficient carbohydrate is not supplied, the body will use protein for energy requirements. This protein may be obtained from muscle tissue to produce a "wasting effect" in some diseases or long term starvation.) Although proteins also yield energy, they are an expensive source. A constant protein source is required in the daily diet. The normal daily protein intake for adults should be .08 g per kilogram (kg) (2.2 lbs) of body weight, or 12 percent of the total caloric intake, as indicated in the 1979 Recommended Daily Allowances, Food and Nutrition Board, National Academy of Sciences. Pregnant women require 1.3 g of protein per kg of body weight.

Proteins play an important role in recovering from injuries of all kinds, such as fractures, burns, and infections. They are also important in healing wounds and recovering from surgical procedures. Protein intake should be increased in accordance with the severity of the above conditions. Calories must be sufficiently high in order to "spare" protein for tissue repair. Carbohydrates and fats can be added liberally. Ideally, the patient should receive protein by mouth; however, it is sometimes necessary to meet the minimum requirements through the parenteral route. Glucose parenteral solution, given during the acute emergency period, will prevent some loss of protein. Protein deficiency may stunt growth, promote a secondary anemia, or induce nutritional edema. Dietary sources of protein are milk, yogurt, meats, fish, cheese, poultry, peanut butter, legumes, and nuts. (Protein from plant sources is best utilized if combined with animal protein, such as milk plus peanut butter, or if legumes are combined with grains, such as Navy beans plus rice.)

FATS

The chief functions of fats are to supply energy and transport fat soluble vitamins. Each gram of fat yields 9 calories. Fats provide the most concentrated source of calories (thus energy) of all the food nutrients. They are found in both the animal and vegetable kingdoms. Fatty acids and glycerol are the end products of the digestion of fats. In the normal diet, fats should contribute 30 percent of the calories. Saturated fat intake should be no more than 10 percent of the total calories. Cholesterol may be limited to 300 milligrams (mg) per day.

Many fats act as carriers for the fat-soluble vitamins A, D, E, and K; they also act both as a padding for vital organs, particularly the kidneys, and as subcutaneous tissue to help conserve body heat. Fat is stored as adipose (fatty) tissue to form a reserve supply in time of need. Fats delay gastric emptying and promote satiety. Excess calories from fat may produce obesity, the forerunner of arteriosclerosis, hypertension, gallbladder disease, and diabetes. Too little fat in the diet may lead to being underweight, having insufficient padding for the vital organs, and lowered energy. Dietary sources of fats are butter, margarine, cream cheese, fatty meats, whole milk, olives, avocados, egg yolks, nuts, and vegetable oils.

CARBOHYDRATES

Carbohydrates (sugar and starches) are the most efficient sources of energy and are known as the "fuel of life." They are abundant in food. The Senate Select Committee on Nutrition and Human Needs, 1977 *Dietary Goals for the United States, Second Edition,* recommends that complex carbohydrates and naturally occurring sugars make up 48 percent of total caloric intake, and refined and processed sugars 10 percent.

Each g of carbohydrate yields 4 calories in the process of its metabolism. Carbohydrates must be reduced to glucose before they can be used by the body. Carbohydrates are stored in the liver as glycogen. The glycogen is broken down and released as glucose at the exact rate needed by the body. This mechanism is controlled largely by the insulin from the pancreas. During fasting glycogen is rapidly depleted, which leads the body to use its fat for energy. The main functions of carbohydrates are to: (1) furnish the main source of energy for muscular work and nutritive processes, (2) help maintain body temperature, (3) form reserve fuel, (4) assist in oxidation of fats and (5) spare protein for growth and repair. Excess carbohydrates are converted into adipose tissue. Dietary sources of carbohydrates are fruits, honey, sweets, legumes, potatoes, grains, sugars, and grain products.

MINERALS

Although the mineral elements constitute only a small portion of the total body weight, they enter into the activities of the body to a much greater degree than their mere weight would indicate. Table 3-1 lists the essential elements, the foods that contain them, and their functions. Certain mineral elements are essential for specific body functions. It is not known exactly how many of the mineral elements are indispensible to the body functions, but changes of concentration that may seem small can be fatal. These essential inorganic elements contribute overwhelmingly to the skeletal framework of the body and the teeth, and are an essential part of many organic compounds. They form an integral part of all cell structure and circulate in body fluids. In addition, they exercise specific physiological influences on the function of body tissues. For the mineral needs to be met satisfactorily, the consumption of each element must be sufficient to cover body tissue requirements and to meet changing physiological needs. It was once believed that any diet that was adequate in other respects would also provide an adequate intake of the essential minerals. This is not true. Foods vary greatly in their mineral content. Depending on growing conditions and storing and preparation procedures, they may vary considerably in nutritional status.

VITAMINS

Vitamins are essential substances present in food in minute quantities. Although they do not furnish energy or act as tissue building materials,

Table 3-1.—Table of Mineral Elements in Nutrition

Element	Rich Sources	Function in the Body
IODINE	Seafoods, water, and plant life in nongoitrous region, sodium iodine in iodized salt	Assists in normal functioning of the thyroid gland.
SODIUM	Table salt, seafood, animal products, and foods processed with sodium	Regulates osmotic pressure, pH balance, and heartbeat.
POTASSIUM	Avocados, bananas, oranges, potatoes, tomatoes, nuts, meat, coffee, tea, milk, and molasses	Regulates osmotic pressure and pH balance. (A constituent of all cells.)
MAGNESIUM	Nuts, whole grain cereals, legumes, and vegetables	Assists in maintaining mineral balance.
CALCIUM	Milk, yogurt, cheese, some green vegetables, molasses, sardines, and salmon	Assists in blood coagulation. Regulates the heartbeat, aids in regulating mineral metabolism and muscle and nerve response. (A constituent of bones and teeth.)
PHOSPHOROUS	Milk, yogurt, poultry, fish, meats, cheese, nuts, cereals, and legumes	Aids in metabolizing organic foodstuffs and maintains pH balance. (A constituent of bones and teeth.)
IRON	Liver, egg yolks, meat, oysters, legumes, whole or fortified grains, dark green vegetables, and dried fruit	Helps carry oxygen throughout the body. (A constituent of hemoglobin, blood, and tissue.)
CHLORINE	Table salt, seafoods, and animal products	Regulates osmotic pressure. (A constituent of gastric acid.)
SULPHUR	Protein foods	Promotes hair and nail formation and growth. (A constituent of all body tissue.)
COPPER	Liver, kidney, nuts, dried legumes, some shellfish, and raisins	Aids in the use of iron in hemoglobin synthesis.
ZINC	Meat, liver, eggs, seafood (especially oysters), milk, and whole grain products	Regulates growth, taste acuity, and appetite. (A constituent of enzymes.)

they do act as catalysts in many body chemical reactions and are necessary for normal metabolic functions, growth, and health of the human body. Their absence results in malnutrition and specific deficiency diseases. Their chemistry is complex and nutritional experimentation is difficult, so our knowledge of them is being continually supplemented and revised. It is quite possible that additional vitamins will be discovered or that some of those already recognized may prove to contain more than one factor.

Vitamins are so widely distributed in food that a properly prepared normal diet usually provides an adequate amount. (See figure 3-1.) Some are destroyed in preparing or preserving certain foods. Some manufacturers add vitamins to their products to replace those destroyed or removed in processing. Fat-soluble vitamins (A, D, E, and K) can be stored in the body. It is possible to consume excessive amounts of these nutrients and cause hypervitaminosis; death may result in extreme cases. Water-soluble vitamins (such as B complex and ascorbic acid) are not stored to any great extent.

Vitamin supplements are usually not necessary if the diet includes a wide variety of foods. Exceptions may occur in prenatal diets in which iron is low and in patients proven to be deficient in a specific vitamin. Vitzmin supplements should be taken only on a physician's or dietitian's recommendation.

WATER

The body can survive weeks without food, but only days without water. It makes up 70 percent of the body weight and is found in every cell in the body. Water is the medium through which the nutrients are transported from the digestive tract to the cells where they are needed. It is also the medium through which the by-products of cell metabolism are removed. Water also serves as the medium in which the chemical processes of life take place. Fluid needs are increased with sweating, vomiting, diarrhea, high protein diets, and hot environments. Water is normally taken into the body in beverages, soups, and in the form of solid foods. An insufficient intake may cause constipation, loss of weight, abnormal body temperature, and dehydration leading to ketosis.

GUIDE TO GOOD EATING

Calculating therapeutic diets can be complicated and is best left to dietitians. For daily living, there is a simple, practical plan, based upon the classification of foods into groups according to the nutrient content.

It is now common practice for dietitians or dietary kitchens to select foods for diets on the basis of food groups. See figure 3-1 for the Guide to Good Eating food groups. They are classified according to their nutritional value and the number of servings that should be eaten each day. This figure can serve as a simple and effective guide in planning or evaluating diets.

DIETS

The appetite of the patient requires catering to, as patients tend to be more fastidious when sick. In some disease states such as cancer, patients experience marked taste changes. Because of the importance of the nutritional elements in feeding the sick, try to carry out the patient's wishes whenever possible. A tactful and observant hospital corpsman will be most helpful to the physician and dietitian in carrying out the dietary regime. You must be aware of what comprises a well-balanced diet and should be able to make dietary adjustments in special situations. This is important to meet the changing needs of the diseased body's ability to make use of foods.

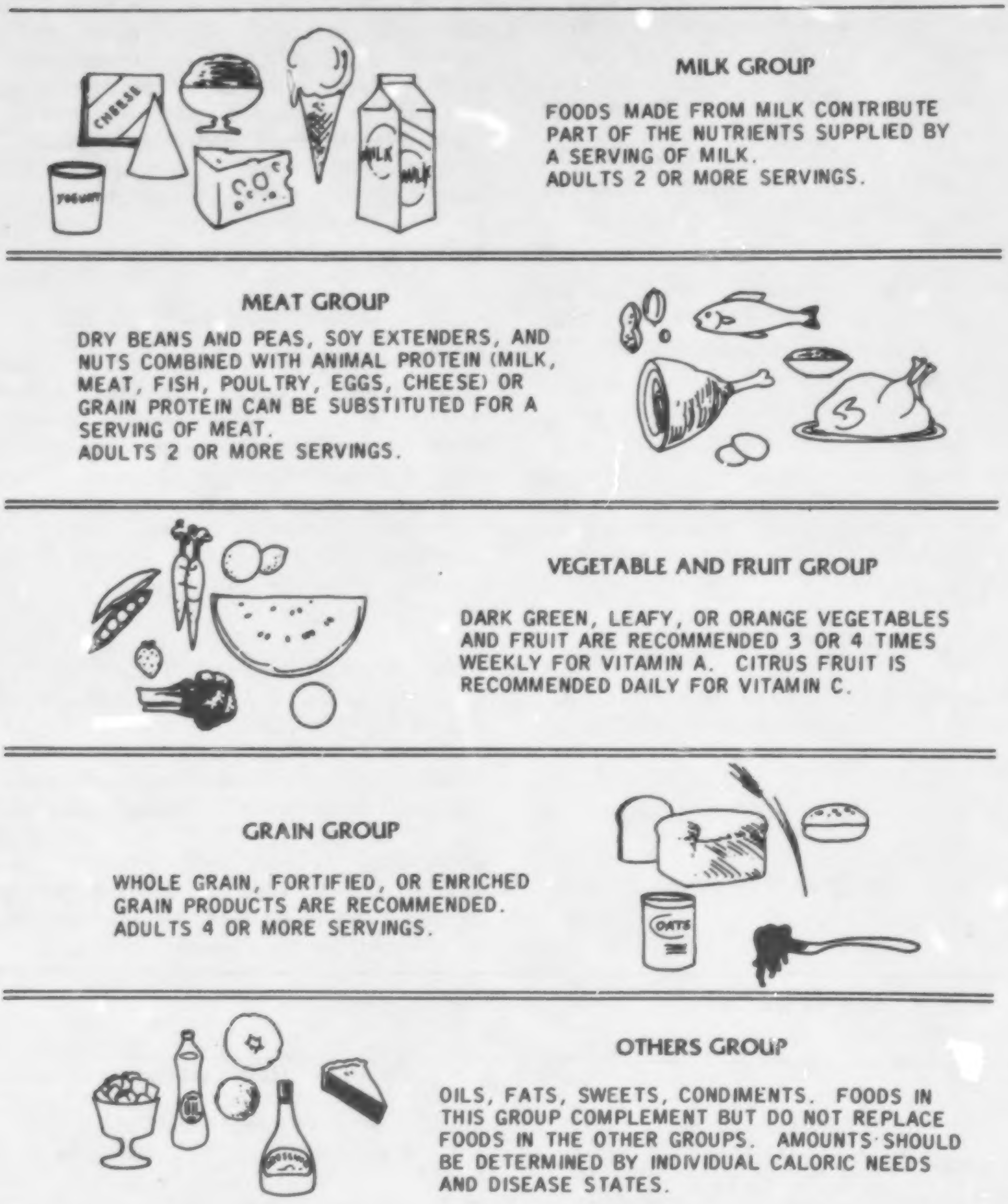
The patient should be made to feel that the utmost cleanliness and care have been observed. The patient's face and hands should be cleaned before food is served, and the lips and teeth cleaned before and after the meal. If the mouth is dry, it should be moistened periodically.

When special or modified diets are ordered, the contents of the tray should be checked with the written orders. An error in serving a special diet may cause discomfort, serious illness, or even death.

OBJECTIVES OF DIET THERAPY

The dietary objectives are:

- To increase or decrease body weight
- To rest a particular organ



A GUIDE TO GOOD EATING

MILK GROUP

FOODS MADE FROM MILK CONTRIBUTE PART OF THE NUTRIENTS SUPPLIED BY A SERVING OF MILK.
ADULTS 2 OR MORE SERVINGS.

MEAT GROUP

DRY BEANS AND PEAS, SOY EXTENDERS, AND NUTS COMBINED WITH ANIMAL PROTEIN (MILK, MEAT, FISH, POULTRY, EGGS, CHEESE) OR GRAIN PROTEIN CAN BE SUBSTITUTED FOR A SERVING OF MEAT.
ADULTS 2 OR MORE SERVINGS.

VEGETABLE AND FRUIT GROUP

DARK GREEN, LEAFY, OR ORANGE VEGETABLES AND FRUIT ARE RECOMMENDED 3 OR 4 TIMES WEEKLY FOR VITAMIN A. CITRUS FRUIT IS RECOMMENDED DAILY FOR VITAMIN C.

GRAIN GROUP

WHOLE GRAIN, FORTIFIED, OR ENRICHED GRAIN PRODUCTS ARE RECOMMENDED.
ADULTS 4 OR MORE SERVINGS.

OTHERS GROUP

OILS, FATS, SWEETS, CONDIMENTS. FOODS IN THIS GROUP COMPLEMENT BUT DO NOT REPLACE FOODS IN THE OTHER GROUPS. AMOUNTS SHOULD BE DETERMINED BY INDIVIDUAL CALORIC NEEDS AND DISEASE STATES.

159.18

Figure 3-1.—A Guide to Good Eating.

- To adjust the diet to the body's ability to use certain foods

- To produce some specific effect as a remedy; for example, to regulate blood sugar in diabetes

- To overcome deficiencies by the addition of food rich in some necessary element

- To provide ease of digestion by omitting irritating substances, such as fiber, condiments, or fried foods

Diets used in the treatment of disease are often spoken of by names that show a special composition and often indicate the purpose for which the diet is intended.

REGULAR DIET

The regular diet composed of all types of foods, is well balanced and capable of maintaining a state of good nutrition. It is intended for convalescing patients who do not require a therapeutic diet.

MODIFIED OR THERAPEUTIC DIETS

These diets are modifications of the regular diet designed to meet specific patient needs. These include:

- Method of preparation (boiling or broiling)
- Consistency (ground or chopped)
- Total calories (high or low calorie diets)
- Nutrients (altering carbohydrate, protein, fat, vitamins, minerals)
- Allowing only specific foods (diabetic diet)

Soft

This diet is soft in texture and consists of liquids and semisolid foods. It is indicated in certain postoperative cases, for convalescents who cannot tolerate a regular diet, in acute illnesses, and in some gastrointestinal disorders. It is an intermediate step between the liquid and regular diets. It is low in connective tissue and indigestible dietary fiber. Little or no condiments are used in its preparation.

Soft diets include all liquids in addition to well-cooked cereals, pastas, white bread and crackers, eggs, cottage cheese, tender meat, fish, poultry, and vegetables including baked, mashed, or scalloped potatoes. Foods not allowed include fried foods, raw vegetables, and nuts. Desserts permitted are custards, gelatin puddings, soft fruits, and simple cakes and cookies. Vegetables can be pureed and meats ground for dental patients.

Liquid

This diet consists of foods that are in a liquid state at body temperature. It is indicated in some postoperative cases, acute illnesses, and inflammatory conditions of the gastrointestinal (GI) tract. It is important that feedings consisting of 6 to 8 ounces or more should be given every 2 to 3 hours while the patient is awake. These diets are usually ordered as clear, full, or dental liquid. A clear liquid diet includes clear broths, black tea or coffee, plain gelatin, and clear fruit juices (apple, grape, and cranberry), popsicles, fruit drinks, and soft drinks. This diet is inadequate in all nutrients. A full liquid diet includes all the liquids served in a clear liquid diet with the addition of strained soups and broths, milk and milk drinks, ice cream, sherbet, puddings, and custard. The all liquid diet is inadequate in iron, niacin, and possibly Vitamin A and thiamin. A dental liquid diet includes foods blenderized and strained in liquid form and all foods allowed on clear and full liquid diets. Vitamin and mineral supplements may be necessary with the dental liquid diet if the recommended amounts of food are not tolerated.

High Calorie

This diet is of a higher caloric value than the average patient normally requires. An increase in total calories is needed by patients who are malnourished, underweight, postsurgical, or convalescing from acute illnesses such as infections, burns, and fevers. The increase in calories is obtained by supplementing or modifying the regular diet with high calorie foods or commercial supplements, giving larger portions, or adding snacks. It is given to meet a need for energy caused by the more rapid metabolism which accompanies certain diseases, especially fever, hyperthyroidism, poliomyelitis, and tuberculosis. In the liquid or soft diet, the caloric value is increased by adding fats and carbohydrates. Proteins are added to prevent depletion of proteins in the plasma (hypoproteinemia). As the patient progresses, a more solid diet is given.

Good sources of high calorie foods are whole milk, cream, sweets, butter, margarine, fried foods, gravies, sauces, and ice cream. Between-meal feedings consisting of milk, milkshakes, cheese, cookies, or sandwiches are recommended, but they should not interfere with the patient's appetite at mealtime.

High Protein

As previously stated, protein is essential for tissue growth and regeneration. The high protein diet is indicated in almost all illnesses; for example, nephrosis, cirrhosis of the liver, infectious hepatitis, burns, radiation injury, fractures, some GI disorders, other conditions in which the protein blood level is low, and in preoperative and postoperative (POSTOP) cases.

In some acute illnesses and disorders, such as infectious hepatitis, GI disorders, and postoperative conditions, patients may be unable to consume solid foods or the daily requirement of protein because of pain or nausea. Therefore, intravenous fluids and nutrients must be substituted for the patient to receive the required amount of protein.

Protein-calorie deficiency is a definite factor in POSTOP wound disruption. This disruption can best be prevented by nutritional measures before surgery. Antibody production will be decreased if the patient receives inadequate protein.

The daily recommended intake of proteins for most patients is at least 1 g per kg of body weight (approximately 70 g). The seriously burned and radiation injury patients should receive about 300 g daily.

Supplement the regular diet with high-quality protein foods such as meat, fish, fowl, cheese, milk, and eggs as listed in table 3-2.

Table 3-2.—Sample High Calorie—High Protein Diet

BREAKFAST	
Fruit	1 fresh or 1/2 cup canned or stewed
Cereal	1/2 cup whole wheat, cooked
Eggs or low cholesteral egg substitute	2 or more daily
Bread or toast	2 slices enriched or whole wheat
Butter or margarine	2 pats or 2 tsp*
Jam or jelly	1 tbsp
Whole milk	1 cup
Coffee	with sugar/cream

*1 pat (butter or margarine) = 1 tsp

Table 3-2.—Sample High Calorie—High Protein Diet—Continued

MIDMORNING

Milk, milk products, or sweetened fruit juice	1 cup

LUNCH

Soup	3/4 cup thick or cream
Lean meat	4 oz (Cheese, fish, or fowl may be substituted.)
Potato	1/2 cup
Vegetables	1/2 cup
Salad	1/2 cup
Salad dressing	1 tbsp
Bread	2 slices enriched or whole wheat
Butter or margarine	2 pats
Fruit	1 fresh or 1/2 cup canned or stewed
Whole milk	1 cup

MIDAFTERNOON

Milk, milk products, or sweetened fruit juice	1 cup

SUPPER

Soup	3/4 cup thick or cream
Lean meat	4 oz (Cheese, fish, or fowl may be substituted.)

Table 3-2.—Sample High Calorie—High Protein Diet—Continued

SUPPER—Continued

Potato	1/2 cup
Vegetables	1/2 cup
Salad	1/2 cup
Salad dressing	1 tbsp
Bread	2 slices enriched or whole wheat
Butter or margarine	4 pats
Fruit	1 fresh or 1/2 cup canned or stewed
Dessert	1/2 cup pudding, custard, or ice cream
Whole milk	1 cup

BEDTIME

Milk, milk products, or sweetened fruit jucie	1 cup

Low Calorie

Low calorie diets are used in the treatment of obesity, but may also be used to control weight in medical conditions such as arthritis, hypertension, diabetes, cardiac disease, or hypothyroidism. A loss of 1 to 2 pounds a week is a medically acceptable reduction in weight. Low calorie diets consist of 800 to 1800 calories per day. A sample 1200 calorie diet is shown in table 3-3. Calorie levels are determined by physicians and dietitians to help meet specific individual patient weight loss goals. The daily intake of proteins should be at least 1 g per kg of standard body weight. Supplemental vitamins may be ordered if the prescribed diet is less than 1200 calories.

Patients on low-calorie diets should be instructed by the dietitian (if available) or other medical personnel knowledgeable in proper eating habits. The dietitian conducts patient interviews to learn the patient's eating behavior, usual portions, preparation of foods, meal patterns, nutritional adequacy, exercise, and so forth. Individual programs should then be advised to assist patients to attain and maintain their ideal weight.

The *Handbook of Clinical Dietetics* lists the formula for determining ideal body weight as follows. For females, the basic weight for 5 feet is 100 pounds. Add 5 pounds for every inch over 5 feet. For males, the basic weight for 5 feet is 106 pounds with 6 pounds added for every inch over 5 feet. Adjustments must be made for body

Table 3-3.—Sample 1200 Calorie Diet

BREAKFAST	
Fruit	1 small fresh or 1/2 cup unsweetened canned
Egg	1 Not prepared in butter, margarine, or oil. (1 oz lean meat may be substituted.)
Bread or cereal	1 slice or 3/4 cup dry cereal
Butter or margarine	2 pats
Milk	1 cup skimmed or buttermilk
Coffee or tea	without sugar or cream
LUNCH	
Soup	1 cup clear broth or strained soup
Lean meat	3 oz (Low fat cheese, or baked fish or fowl may be substituted.)
Vegetables	1/2 cup
Salad	1/2 cup
Salad dressing	1 tbsp low cal
Bread	2 slices
Butter or margarine	3 pats
Coffee or tea	without sugar or cream

Table 3-3.—Sample 1200 Calorie Diet

SUPPER

Soup	1 cup clear broth or strained soup
Lean meat	3 oz (Low fat cheese, or baked fish or fowl may be substituted.)
Potato, bread, or rice	1 medium, 1 slice, or 1/2 cup cooked
Vegetables	1/2 cup
Lettuce salad	Unlimited
Salad dressing	1 tbsp low cal
Butter or margarine	1 pat
Fruit	1 small fresh or 1/2 cup unsweetened canned
Milk	1 cup skimmed or buttermilk
Coffee or tea	without sugar or cream

Limit cooking fats, alcoholic beverages, fatty meats, rich and sweet desserts, nuts, cream, sugar, butter or margarine (other than allowed amounts), thick soups, fried foods, and oily salad dressings.

build. Reduce desired weight by 10 percent for a small frame; increase it by 10 percent for a large frame. Total caloric requirements are based on ideal body weight plus activity.

Many patients on low-calorie diets experience hunger. To satisfy this hunger or appetite, low-calorie foods such as raw vegetables, dill pickles, broth, black coffee or tea, and bran should be provided. Water and salt need not be restricted unless there are cardiac complications or edema and the restrictions are ordered by the physician.

Low Protein

As the name implies, this diet is made up of foods that furnish only small amounts of protein and consists largely of carbohydrates and fats. Calories should be high to "spare" protein. Foods such as marshmallows, hard candy, and butter are used liberally. It is used in renal diseases associated with nitrogen retention or GI disorders when putrefaction is present. Limited amounts of protein are sometimes advocated in certain kidney diseases such as chronic nephrotic edema. Low protein diets for renal failure are usually restricted in sodium and potassium as they are not excreted properly. In some cases of chronic renal insufficiency, the protein content of the diet is varied, usually between 40 and 50 g per day, so that there will be sufficient complete protein to maintain nitrogen equilibrium.

In some metabolic disturbances such as amino acids in the urine, protein restriction may be of therapeutic value. A sample low protein diet is listed in table 3-4.

Table 3-4.—Sample Low-Protein Diet

BREAKFAST

Fruit or juice	1 citrus fruit or 1/2 cup other fruit juice (Recommended once daily)
Cereal	1 cup whole wheat, cooked
Egg	1 daily
Toast	1 slice
Butter or margarine	1 pat or more
Jelly or jam	As desired
Coffee	As desired
Cream	As desired

Table 3-4.—Sample Low-Protein Diet

LUNCH

Soup	1 bowl, clear
Meat	2 oz
Potato	1 medium, baked
Salad	1/2 cup
Fruit	1 grapefruit or orange
Bread	1 slice
Jelly or jam	As desired
Butter or margarine	1 pat
Coffee	As desired
Hard candy	As desired

SUPPER

Soup	1 bowl, clear
Cottage cheese	2 oz
Vegetables	1/2 cup
Salad	1/2 cup
Bread	1 slice
Jelly or jam	As desired
Butter or margarine	1 pat
Marshmallows	As desired
Fruit	1 small piece
Milk	1 cup

Avoid meat and milk (other than allowed amounts), peas, beans, nuts, cheese, and desserts or soups containing milk or eggs.

High Residue Diet

The high residue (high bulk, high fiber, high roughage) diet is indicated in atonic constipation, spastic colon, irritable bowel syndrome, and diverticulosis. This diet encourages regular elimination by stimulating muscle tone, creating softer and larger stools that are more easily propelled through the colon. This reduces the pain and cramping that accompany spastic colon or irritable bowel syndrome.

The patient is given a regular diet with the inclusion of high residue foods. The main sources of fiber are whole grain breads and cereals, bran, fresh fruits, and vegetables which are raw or cooked until tender crisp. Whole grain breads and cereals that contain wheat bran have a greater laxative effect than fruits and vegetables, because the bran acts to absorb water within the colon. At least one serving of 100% wheat bran cereal is recommended daily. Raisin bran, bran flakes, shredded wheat, and oatmeal may be used occasionally, but they contain less than half the amount of fiber in All Bran or Bran Buds. Fresh fruits and vegetables with edible skins such as apples and grapes are higher in fiber than canned fruits or vegetables and their juices.

Dietary intake of refined sugars and starches should be decreased as they are poor sources of fiber. Limit white flour products, refined cereals, pies, cakes, and cookies.

Fluids are increased. Too little fluid in the diet may cause dehydration and lead to constipation. The patient must drink at least 8 glasses of water or other fluids daily, particularly when consuming the recommended amount of bran. Drinking too much alcohol, coffee, cola, tea, and soft drinks can irritate a sensitive colon and can cause dehydration. If possible, use decaffeinated coffee. One or two glasses of water in the morning helps to stimulate peristalsis.

Excessive intake of alcohol, caffeine containing beverages (coffee, tea, colas), chili powder, dried beans, fruits with seeds and skins, nuts, pepper, popcorn, and strong spices may cause irritability. These foods should be individualized to the patient.

When progressing from a low residue diet after an acute infection or diverticulitis, increase fiber in the diet gradually. Start by adding one serving of 100% bran cereal and three servings of whole grain bread to the low residue menu pattern. Gradually increase the amount of raw vegetables and fresh fruits to at least four servings per day.

Laxatives may cause decreased absorption of vitamins, loss of minerals, or inhibition of glucose uptake.

A sample high residue diet is contained in table 3-5.

Table 3-5.—Sample High-Residue Diet

ON RISING	
Water	1 or 2 glasses
BREAKFAST	
Fresh fruit or fruit juice	1/2 cup
Cereal	1 cup whole grain, oatmeal with bran
Egg	1 Prepared in any style. (1 oz meat may be substituted.)

Table 3-5.—Sample High-Residue Diet—Continued

BREAKFAST—Continued	
Bread	1 slice whole wheat
Butter or margarine	As desired
Milk	1 cup
Beverage	Decaffeinated coffee, tea, as desired
LUNCH	
Soup	1 cup with bran
Meat	4 oz
Potato	1 medium
Vegetables	1/2 cup
Salad	1/2 cup lettuce, celery, or tomatoes
Salad dressing	As desired
Bread	1 slice whole wheat
Butter or margarine	As desired
Dessert	1 serving
Beverage	As desired (Decaffeinated Coffee, tea)
SUPPER	
Soup	1 cup with bran
Meat	4 oz
Potato	1/2 cup
Vegetables	1/2 cup
Salad	As desired
Salad dressing	As desired
Fresh apple	1 large
Beverage	As desired (Decaffeinated coffee, tea)
BEDTIME	
Fruit	Prunes, figs, dates, raisins, or pears

Low Residue

This diet is indicated in ulceration, inflammation, and other gastric disorders, such as partial intestinal obstruction. It is also used in certain POSTOP states that affect any part of the GI tract, for example, a hemorrhoidectomy. Low residue diets are also used in treating dysenteries of long duration.

The purpose of this diet is to provide nonstimulating and nonirritating, easily digested material that leaves little residue to avoid mechanical irritation of the GI tract. Commercially prepared low residue supplements such as "Vivonex" by Eaton or "Precision Low Residue" by Doyle, may be given to provide complete nutrition.

Foods Allowed

Beverages:	Orangeade, grapeade, and lemonade; weak tea and coffee; decaffeinated coffee
Bread:	White, enriched
Cereals:	Cooked, refined corn, rice, and wheat cereals, grits (No bran)
Cheese:	Cottage, cream, and mild cheddar in cooking
Desserts:	Rice and tapioca puddings, custards, gelatin, ice cream, plain cake, and cookies. (Count desserts containing milk in the milk allowance.)
Eggs:	Soft cooked or poached (1 or 2 daily)
Fat:	Butter, margarine, and salad dressing
Fruits:	Orange juice, grapefruit juice, and strained apples, peaches, pears, and ripe bananas
Meat:	Crisp bacon; tender meat, fish, or fowl that is baked, boiled, or broiled
Milk:	Whole or skim, cream, or cocoa (2 cups daily)
Soups:	All strained, creamed, and pureed
Vegetables:	Pureed spinach, peas, carrots, string beans, asparagus tips, squash, white potatoes (2 servings daily)

Foods to Avoid

Avoid raw and dry fruits, coarse whole grain cereals, nuts, uncooked cheeses, fatty foods, rich desserts, hot breads, fried foods, spicy seasonings, fibrous meats, alcoholic beverages, very hot or very cold foods; gas-forming vegetables such as cabbage, turnips, dry lentils, beans, and onions. A sample low residue diet is contained in table 3-6.

Low Sodium

A low sodium diet consists of foods containing a very small percentage of sodium with no salt added in preparation or by the patient. It is impossible to prepare an absolutely sodium-free diet.

The low sodium diet is indicated when edema is present, in renal diseases, in hypertension, and in certain cardiac conditions.

The nephrotic patient is often unable to excrete sodium in a normal manner. The kidneys' retention of sodium leads to edema. A low-sodium diet is thus indicated with no restriction on salt-free fluids. Such patients should be encouraged to drink 2,000 to 3,000 milliliters (ml) of low sodium fluids daily.

The allowance of sodium in a strict low sodium diet is 250 to 1000 mg daily. The allowance of sodium in a moderate low sodium diet is 2000 mg or 2 g. Regular diets with no salt added contain 2.4 to 4.5 g of sodium.

Table 3-6.—Sample Low Residue Diet

BREAKFAST	
Fruit juice	1/2 cup orange, grapefruit, or apple
Cereal	1 cup cream of wheat or rice
Egg	1 poached
Bread	1 slice white, toasted
Butter or margarine	As desired
Beverage	Milk (1 cup), tea, or coffee
LUNCH	
Soup	1 cup vegetable, strained or pureed
Meat	3 oz broiled meat, fish, or fowl
Potato	1 medium white
Vegetable	1/2 cup pureed
Bread	1 slice white
Butter or margarine	As desired
Dessert	1 serving plain cake or cookies
Fruit	1 ripe banana
Beverage	Coffee or tea

Table 3-6.—Sample Low Residue Diet

SUPPER

Soup	1 cup strained tomato
Meat	3 oz broiled meat, fish, or fowl
Potato	1 medium white
Vegetable	1/2 cup pureed
Bread	1 slice white
Butter or margarine	As desired
Dessert	1/2 cup pureed peaches
Beverage	Milk (1 cup), coffee, or tea

Any diet in which the amount of sodium is drastically reduced has possible side effects. The patient who is on this regimen must be constantly observed, particularly in warm climates, for lassitude, complaints of weakness, anorexia, nausea and vomiting, mental confusion, abdominal cramps, and aching skeletal muscles.

Foods Allowed

Beverages:	Milk (2 cups daily), carbonated beverages (1 cup daily), unsalted fruit juices, coffee, and tea
Bread	Made without baking soda, baking powder, or salt. Low sodium baking soda and baking powder are allowed. Regular bread is provided on diets of 2000 mg sodium and above.
Cereals:	Cooked without salt. Puffed wheat or rice, or shredded wheat
Desserts:	Any desserts made without salt, baking soda, or baking powder.
Fat:	Unsalted butter and margarine, shortening, cream, oil, low sodium salad dressing
Fruits:	Any unsalted canned, cooked, fresh frozen, or raw fruit
Meat:	Meat, fish, or fowl prepared without salt or sodium compounds such as meat tenderizers, steak sauce, soy sauce

Soups:	Low sodium including broth
Sweets:	Pure sugar candy, and jams and jellies made without sodium benzoate
Vegetables:	Salt-free raw, cooked, or canned dietetic

Foods to Avoid

Avoid cultured buttermilk, chocolate milk; pancakes, waffles, and desserts prepared with salt, baking soda, or baking powder; most instant cooked cereals; jam, jelly, or dried fruit containing sodium benzoate; vegetables prepared with salt; salted condiments; canned, salted, or smoked meats; soy sauce, MSG (monosodium glutamate), steak sauce, pickles, olives, salted nuts, and peanut butter. See table 3-7 for a sample low sodium diet.

Table 3-7.—Sample Low Sodium Diet (1,000 mg)

BREAKFAST	
Fruit	1/2 cup
Cereal	1/2 cup unsalted or low sodium oatmeal
Egg	1 soft cooked
Bread	1 slice low sodium, toasted
Butter or margarine	1 pat unsalted or low sodium
Beverage	1 cup coffee
LUNCH	
Soup	1 serving low sodium cream of tomato
Meat	2 oz low sodium
Potato	1/2 cup low sodium
Vegetables	1/2 cup low sodium
Bread	1 slice low sodium

Table 3-7.—Sample Low Sodium Diet (1,000 mg)—Continued

LUNCH—Continued	
Butter or margarine	1 pat low sodium
Fruit	1 piece, fresh
Salad	1/2 cup
Salad dressing	1 tbsp low sodium
Beverage	Juice or coffee
SUPPER	
Soup	1 cup low sodium beef broth
Meat	2 oz low sodium
Potato	1/2 cup low sodium
Vegetables	1/2 cup low sodium
Bread	1 slice low sodium
Butter or margarine	1 pat low sodium
Fruit	1 sliced banana
Salad	1/2 cup
Salad dressing	1 tbsp low sodium
Beverage	1 cup milk or coffee

BLAND DIETS

This diet may be helpful for gastritis, hyperacidity, hemorrhoids, peptic ulcers and other GI disorders. A dietary management of patients with chronic ulcer disease has been the subject of much controversy. Bland diets have traditionally been used for these patients. Experiments show that there is no significant difference in the response of patients with an active duodenal ulcer to a bland diet. The American Dietetic Association states that the only known irritants to the gastric mucosa include alcohol, black pepper, caffeine, chili powder, cocoa, coffee, drugs, and tea.

Emphasizing how to eat is as important as indicating what foods to eat, since there are individual responses to bland diets. Offer the following suggestions to the patient:

Avoid worry and emotional upsets at mealtime
Chew food well and eat slowly
Rest before and after meals
Avoid foods of extreme temperatures

If fruits and juices between meals cause distress, try including them with meals.

The "Six Meal Bland Diet" follows the most conservative approach to the dietary treatment of active ulcer disease. Chemical, mechanical, and thermal irritants are eliminated. Meals are kept small to reduce gastric acidity and distention. Avoided are fatty meats, fried foods, whole grain breads and cereals, dried beans and peas, cabbage family vegetables, bouillon, broths, chocolate, nuts, seeds, carbonated beverages, caffeine, coffee, decaffeinated coffee, and tea. Patients may use allspice, cinnamon, mace, paprika, sage, thyme, catsup, cranberry or mint jelly, and extract and flavorings without chocolate, salt, and vinegar.

The "Bland Diet" allows a more liberal food selection, reduces the number of meals to three, and increases the quantity of foods given. Avoided are whole grain breads and cereal, bouillon, clear broths, chocolate, nuts, seeds, dried fruits, and caffeine. The diet must be individualized to the patient.

The "Regular-No Stimulants Diet" eliminates only those items which have been shown scientifically to irritate the gastric mucosa—alcohol, black pepper, caffeine, chili powder, cocoa, coffee, drugs, and tea.

Decaffeinated coffee may be restricted as recent studies show that it causes increased gastric acid secretion and esophageal pressure causing gastric acid reflux in the esophagus. Decaffeinated coffee is only offered on the Bland Diet and the Regular-No Stimulant Diet if tolerated by the patient.

Chronic and excessive use of antacids to treat hyperacidity and related conditions may result in thiamin deficiency, presumably because of alkaline destruction of thiamin within the bowel lumen. Excessive intake of milk with antacids may cause systemic alkalosis and hypercalcemia. Milk may be contraindicated in patients with allergic reactions or lactase deficiency.

Sample menu patterns follow for the Six Meal Bland Diet and Bland Diet. A sample menu pattern is not listed for the Regular-No Stimulants Diet as it is derived from the regular diet.

Six Meal Bland Diet Sample Menu

BREAKFAST

Juice	1/2 cup
Egg, cooked without fat	1
White toast	1 slice
Butter or margarine	1 pat
Jelly	As desired
Milk	1/2 cup

AM SNACK

Strained fruit	1/2 cup
Plain cookie	1
Eggnog	1/2 cup

Six Meal Bland Diet Sample Menu

LUNCH

Lean meat	2 oz
Bland potato or substitute	1/4 cup
Bland vegetable	1/4 cup
Butter or margarine	1 pat
Milk	1/2 cup

PM SNACK

White toast	1 slice
Butter or margarine	1 pat
Jelly	as desired
Pudding	1/2 cup
Milk	1/2 cup

SUPPER

Lean meat	2 oz
Bland potato or substitute	1/4 cup
Bland vegetable	1/4 cup
Butter or margarine	1 pat
Milk	1/2 cup

BEDTIME SNACK

Plain cake	1 portion
Milkshake	6 oz

Bland Diet Sample Menu

BREAKFAST

Juice	1/2 cup
Refined cooked cereal	1/2 cup
Eggs or lean meat	2 or 2 oz
White toast	2 slices
Butter or margarine	2 pats
Jelly	As desired
Milk	8 oz
Decaffeinated coffee	(if tolerated)

LUNCH OR SUPPER

Cream soup	3/4 cup
Saltines	4
Lean meat	3 oz
Bland potato or substitute	1/2 cup
Bland vegetable	1/2 cup
Salad	1 portion
Salad dressing	As desired
White bread or roll	1
Butter or margarine	As desired
Bland dessert or fruit	1 portion
Milk	8 oz
Decaffeinated coffee	(if tolerated)

Low Carbohydrate, High Protein Diet

A low carbohydrate, high protein diet is used in the treatment of hypoglycemia. This diet limits simple carbohydrates which are quickly absorbed into the blood. A marked rise in blood sugar stimulates the pancreas to over-produce insulin which leads to a hypoglycemic state as too much sugar is transported out of the blood.

The diet must be individualized to the patient as hypoglycemic reactions may occur at any time for various reasons. For example, meal skipping, inadequate calorie intake with excessive energy expenditure, and drinking alcohol may precipitate a low blood sugar reaction.

The foods may be divided into 3 to 6 or more small meals. Liberal amounts of protein and fat are used as they are more slowly digested and absorbed. Included are meats, fish, poultry, cheese, eggs, fats, low starch vegetables, and limited amounts of unsweetened fruit and juices, breads, cereals, and high starch vegetables. Because milk contains the sugar lactose, it should be limited to 2 cups a day for an adult.

Sweets such as candy, sugar, jams, jellies, soft drinks, and pastries should be avoided to help prevent hypoglycemic reactions. They should be consumed only to quickly increase blood sugar levels during a hypoglycemic reaction. If reactions are frequent, it is helpful to carry hard candy for quick and easy use. Handy high protein snacks to help prevent reactions may include cheese, peanut butter, milk, and hard boiled eggs.

A sample low carbohydrate, high protein menu follows:

BREAKFAST

Juice	1/2 cup unsweetened
Egg or meat	2 or 2 oz
Bread	1 slice
Butter or margarine ...	As desired
Milk	1/2 cup

AM SNACK

Milk	1/2 cup
Crackers	3
Cheese	2 oz

LUNCH

Meat	4 oz
Vegetable (non starch)	1/2 cup
Starch vegetable (potato, corn, rice)	1/4 cup
Butter or margarine ...	As desired

PM SNACK

Milk	1/2 cup
Meat	3 oz
Fresh fruit	1 piece

SUPPER

Meat	4 oz
Vegetable (non starch)	1/2 cup
Unsweetened fruit	1/2 cup or 1 piece
Butter or margarine ...	As desired

BEDTIME SNACK

Milk	1/2 cup
Cottage cheese	3/4 cup
Graham crackers	1

CHAPTER 4

PRESCRIPTION WRITING AND FILLING

As you advance in rate to Hospital Corpsman First Class and eventually Chief Hospital Corpsman, your work will become more and more specialized, and your responsibilities will involve more supervision and training of others. Not only will you probably head up a department, but you will also have more people working under your supervision in various capacities. One of these departments for which you might conceivably become responsible is the pharmacy, the service that fills prescriptions.

If you haven't already studied the chapter on pharmacy in the HM 3 & 2 training course, you should do so now, since this chapter is a continuation of it.

The key instrument used in the pharmacy is the prescription—the written order from the prescriber directing the pharmacy to compound and dispense a drug or medication for the use of the patient. To accomplish this correctly, prescription writing and filling must be thoroughly understood.

Any information pertaining to the prescription is confidential and shall not be made known to persons not involved.

Another important point to remember is that a prescription or any part of it cannot be applied or transferred to any person other than the patient specified.

The Prescription

For proper utilization, the prescription must contain certain information written legibly in ink on a bonafide prescription blank (DD Form 1289, fig. 4-1) or a polyprescription blank (NAVMED 6710/6, fig. 4-2). The prescription shall contain the name of the ship or station where it was written. This is important if the source of prescribing has to be traced.

To avoid errors, the patient's full name, rate, and address, and age if under 12, shall be clearly written on the prescription. This will aid in getting the right medication to the patient for whom it is intended.

The superscription "Rx" means take or take thou or in effect, "I want this patient to have the following medication."

The inscription is that part of the prescription which lists the names and quantities of the ingredients to be used. Legibility here is of utmost importance since the spelling of a great many unrelated drugs is quite similar. Whenever there is doubt as to the drugs or their amounts listed in the inscription, always double-check with the prescriber. The metric system should be used to list amounts.

The subscription follows the inscription and is that part of the prescription which gives directions to the compounder.

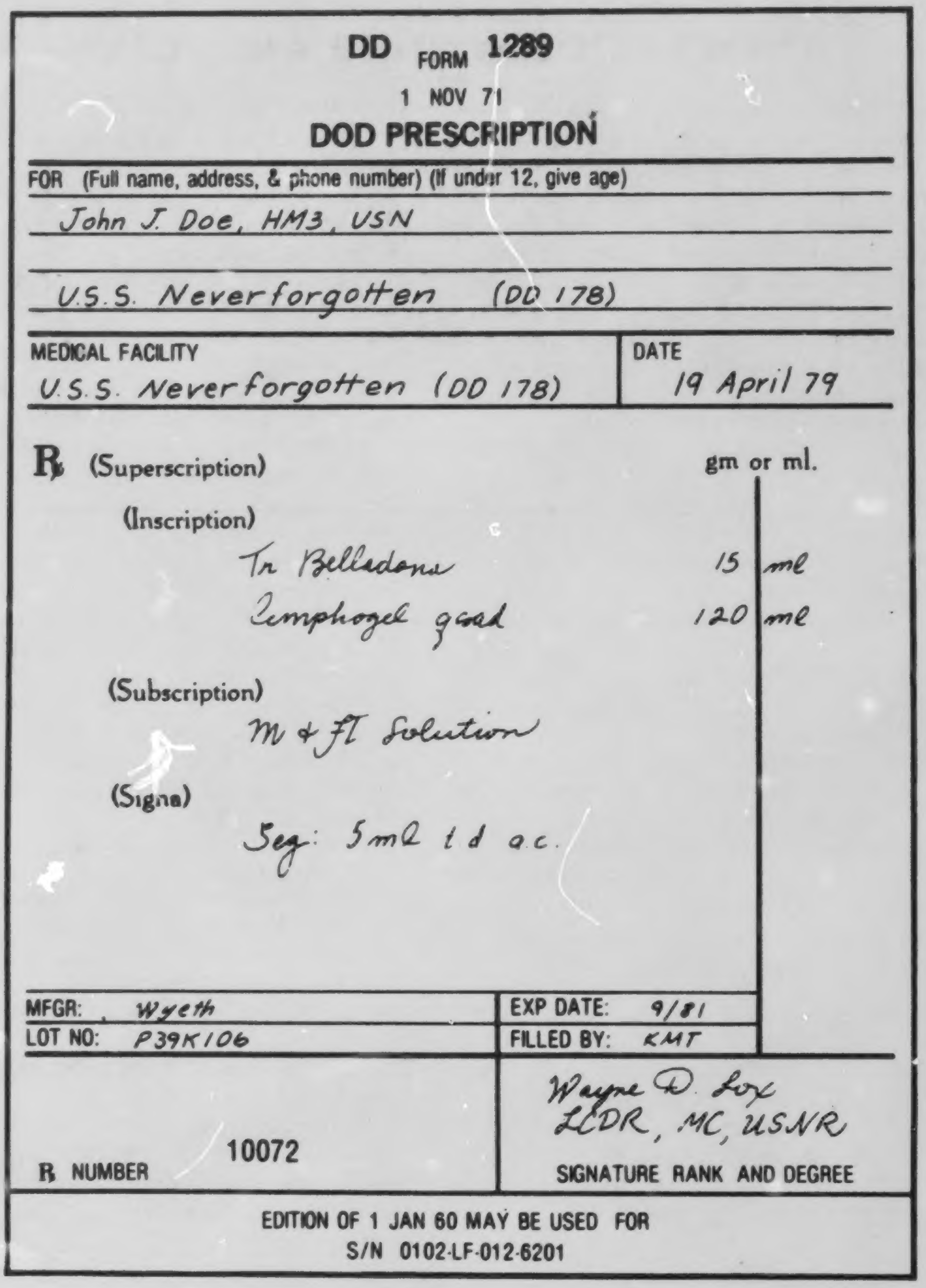
The signa, not to be confused with the prescriber's signature, is that part of the prescription which gives the directions for the patient. This portion is preceded by the abbreviation: "Sig."

Last but by no means least, all prescriptions must be signed by the prescriber. The prescriber's full name signature should be legible and the rate or rank, corps, and service should be included. Mimeographed, preprinted, or rubber-stamped prescriptions and signatures should not be used.

Who May Write a Prescription

According to chapter 21 of the *Manual of the Medical Department*, the following persons are authorized to write prescriptions: Officers of the Medical and Dental Corps, Medical Service

96



DD FORM 1289
1 NOV 71
DOD PRESCRIPTION

FOR (Full name, address, & phone number) (If under 12, give age)
John J. Doe, HM3, USN
U.S.S. Neverforgotten (DD 178)

MEDICAL FACILITY U.S.S. Neverforgotten (DD 178)	DATE 19 April 79

℞ (Superscription)

(Inscription)

	gm or ml.
Tr Belladona	15 ml
Amphogel qsad	120 ml

(Subscription)
M & ft Solution

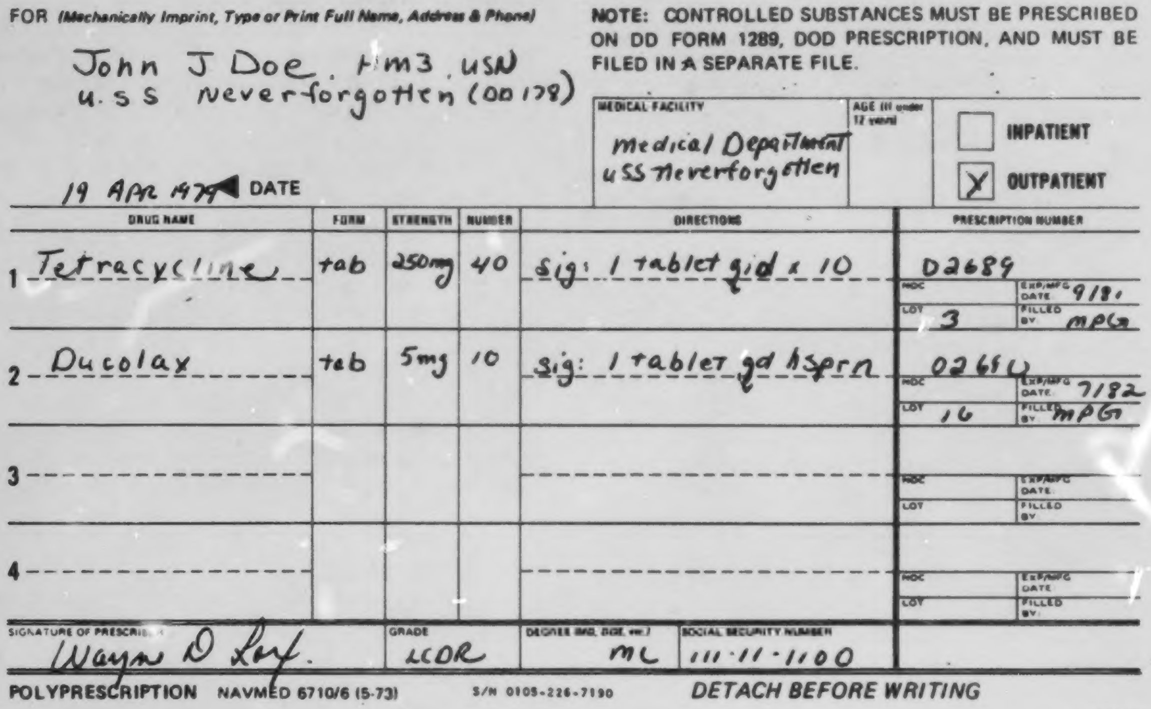
(Signa)
Sig: 5ml t i d a.c.

MFGR: Wyeth	EXP DATE: 9/81
LOT NO: P39K106	FILLED BY: KMT
℞ NUMBER 10072	Wayne D. Fox LCDR, MC, USNR SIGNATURE RANK AND DEGREE

EDITION OF 1 JAN 60 MAY BE USED FOR
S/N 0102-LF-012-6201

159.19

Figure 4-1.—DOD Prescription.



FOR *(Mechanically Imprint, Type or Print Full Name, Address & Phone)*

John J Doe, HM3, USN
U.S.S Neverforgotten (DD 178)

19 APR 1979 DATE

NOTE: CONTROLLED SUBSTANCES MUST BE PRESCRIBED ON DD FORM 1289, DOD PRESCRIPTION, AND MUST BE FILED IN A SEPARATE FILE.

MEDICAL FACILITY	AGE (If under 12 years)	
Medical Department USS Neverforgotten		☐ INPATIENT ☒ OUTPATIENT

	DRUG NAME	FORM	STRENGTH	NUMBER	DIRECTIONS	PRESCRIPTION NUMBER
1	Tetracycline	tab	250mg	40	sig: 1 tablet qid x 10	D2689 NDC EXP/MFG DATE 9/81 LOT 3 FILLED BY MPG
2	Ducolax	tab	5mg	10	sig: 1 tablet qd hs prn	02690 NDC EXP/MFG DATE 7/82 LOT 16 FILLED BY MPG
3						NDC EXP/MFG DATE LOT FILLED BY
4						NDC EXP/MFG DATE LOT FILLED BY

SIGNATURE OF PRESCRIBER	GRADE	DEGREE (MD, DDS, etc.)	SOCIAL SECURITY NUMBER
Wayne D Lof.	LCDR	MC	111-11-1100

POLYPRESCRIPTION NAVMED 6710/6 (5-73) S/N 0105-226-7190 *DETACH BEFORE WRITING*

159.20

Figure 4-2.—Polyprescription.

Corps podiatrists, civilian physicians employed by the Navy, and independent duty Hospital Corps personnel. Qualified military nurse practitioners and military physician's assistants may write prescriptions when authorized in writing by the commanding officer. Medical and dental interns are not allowed to write prescriptions for substances listed in schedules II and III.

With the exception of the polyprescription, prescriptions will be limited to one item per prescription. (It goes without saying that it will also be restricted to one patient.) The use of brand names of drugs and medical stores should be avoided in prescription writing. Generic names will be used whenever possible.

The quantity of the drug prescribed will be a reasonable amount needed for the patient. Excessive or unrealistic quantities will not be prescribed. Erasures are prohibited, and interlineations must be initialed.

Filling the Prescription

When you as the compounder in the pharmacy receive a prescription for filling, you should follow certain basic steps to make sure that the right patient gets the right medicine in the right amount in the right way. There are no shortcuts in this business, nor is there room for any ifs, ors, or maybes—in pharmacy things are done right or not at all!

Verification

First of all, satisfy yourself that the prescription you have received is a bonafide one and that the person you have received it from is in fact entitled to having it filled by your pharmacy. You don't need to be tedious about verification—the simplest and best way is to ask for an ID card. Verify the date on the ID card.

Check for Accuracy

Study the prescription carefully and satisfy yourself that the drug prescribed is in fact reasonable, that its amount or dosage is realistic as compared to the patient's age, and that the quantity of the medication is a practical one. A prescription calling for 1,000 tetracycline tablets or a pint of paregoric, for instance, warrants further inquiry.

If, in this process of verification, you feel that there is a discrepancy, an ambiguity, or an incompatibility, or if for any reason it is necessary to consult the prescriber, the patient should never be allowed to suspect that anything is amiss. You should never fill a prescription you do not completely understand or you feel is incorrect. What appears to be an overdose may be the desired dose for a specific patient, but the prescriber will appreciate being called for verification of the dose.

When you are sure you understand the prescription and are satisfied that it is in all respects correct, you should give its filling your undivided attention. Most mistakes are made when the person filling the prescription is either interrupted while doing so or is trying to accomplish more than one chore at a time.

It is good practice to type the label before you fill the prescription, since it affords more time for considering the manner of compounding and the doses involved. The labels on the containers used in filling the prescriptions should be read three times:

1. When the container is taken from the shelf
2. Before the contents are removed from the container
3. Before the container is returned to the shelf

Prescription Labeling

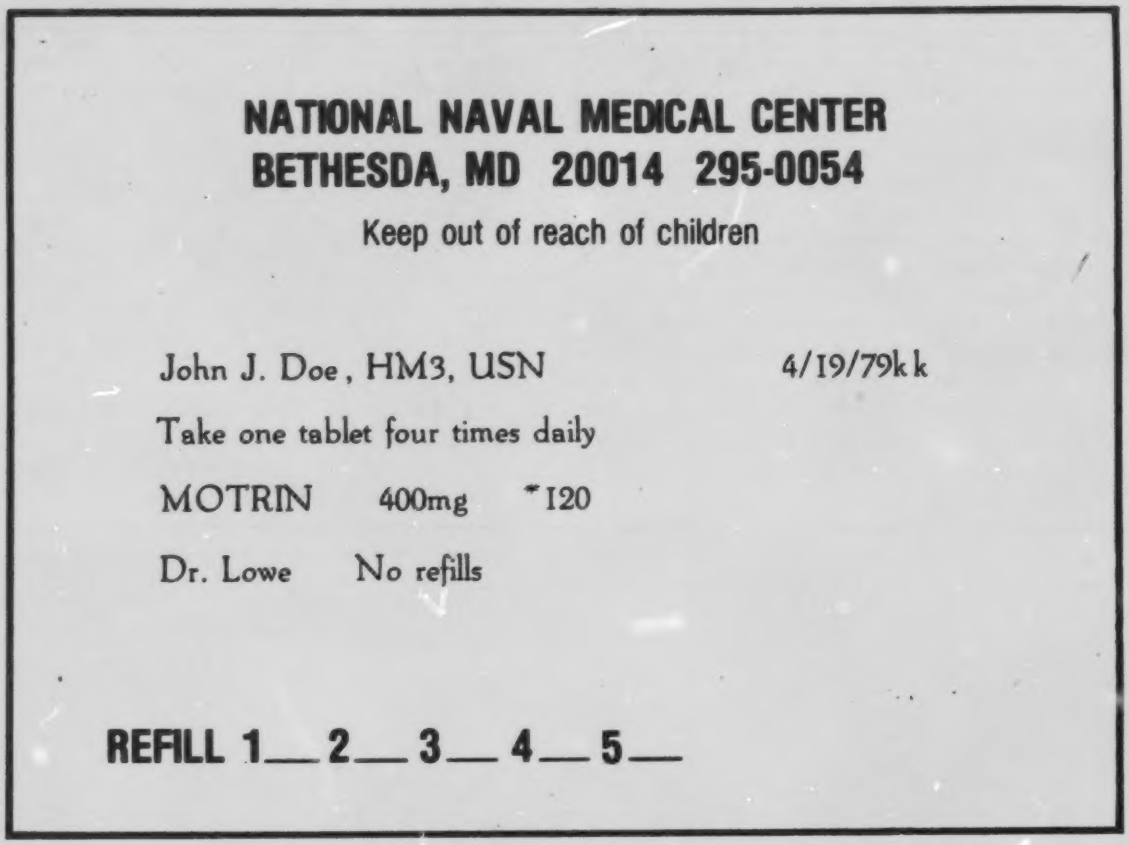
The proper labeling of a prescription is as important as filling it correctly. It is reasonable to assume that if a great deal of accuracy is necessary to properly compound a prescription, it is just as important that the patient take the correct amount of medication in the right manner to receive its maximum benefits. Improperly written or misunderstood directions on a prescription label can be disastrous. All labels must be clearly typed and their directions translated into simple layman's language. Keep in mind that the prescription label serves two purposes. First and most important, it gives the patient directions pertaining to the medication; second, in case of misuse or error, it is the quickest means by which the contents of the prescription container, the person who wrote the prescription, and the person who filled it can be traced. Consequently, the following information must be included on the label (fig. 4-3):

1. The name and telephone number of the dispensing facility
2. The prescription number (must correspond to the number on the prescription)
3. The date the prescription is filled
4. The patient's name—in sufficient detail for identification
5. The directions to the patient, transcribed accurately from the prescription, in clear, concise layman's language
6. The prescriber's name and rate or rank—in sufficient detail for identification
7. The initials of the compounder
8. Authorized refills, if any
9. The expiration date, if applicable
10. Name, stength, and quantity of medication dispensed.

Other information that may need to be attached to the prescription container are labels reading "Shake Well Before Using" or "For External Use Only." "Poison" labels are best omitted when a preparation is intended for external use, as many physicians prefer the "External Use Only" labels.

After the presciption is labeled, the ingredients should be checked again by some systematic method to ensure accuracy.

As an added precaution and to aid expeditious identification of drugs, in case of undesirable effects, the manufacturer and the lot number of the proprietary drug dispensed shall be noted on the prescription. This procedure does not apply when the medication consists of a mixture of several ingredients. It is wise to put the initials or the code of the person filling the prescription on the prescription blank.



NATIONAL NAVAL MEDICAL CENTER
BETHESDA, MD 20014 295-0054
Keep out of reach of children

John J. Doe, HM3, USN 4/19/79kk
Take one tablet four times daily
MOTRIN 400mg #120
Dr. Lowe No refills

REFILL 1__ 2__ 3__ 4__ 5__

159.21

Figure 4-3.—Prescription Label.

Prescription Files

Prescriptions that have been filled must be maintained in one of several separate files:

1. Schedule II and III narcotics—Prescriptions containing narcotics shall be numbered consecutively, preceded by the letter "N," and filed separately.
2. Alcohol and alcoholic beverages—These prescriptions shall be numbered consecutively, preceded by the letter "A," and filed separately.
3. Schedule III, IV, and V drugs—These prescriptions are numbered in the same manner as and are part of the general files; however, they are maintained separately.
4. General files—All other prescriptions shall be numbered consecutively and filed together.

All prescriptions shall be written in black or blue-black ink or indelible pencil, or typewritten, and shall be kept on file for a period of at least 2 years after the date of issue.

WHERE AND WHY PRESCRIPTIONS GO WRONG

Contrary to common belief, errors in prescription filling are seldom due to gross negligence or ignorance of technical aspects. The vast majority of errors are due to human frailties which could be avoided. The following are some major causes of error, and you should pay particular attention to them.

1. Giving the prescription to the wrong person. Occasionally, especially during rush hours, prescriptions go to the wrong person, either through misunderstanding or inattention. Make absolutely sure that you have the right patient, both when you receive the prescription and when you dispense the finished product.

2. Switching labels. Many times when a patient has more than one prescription, or when the compounder is filling several prescriptions at a time, the label of one prescription is inadvertently fastened to the container of another, with consequent conflict of directions. It is absolutely imperative that the right label go with the right medication.

3. Overconfidence. Statistics show that the majority of mistakes are made by the "experts"—those who have been doing things for so long they have become overconfident and have begun to take shortcuts. Whenever you feel that you have become so good at filling prescriptions that you no longer need to doublecheck your work, stop and think—you may be inviting disaster.

4. Dishonesty or cheating. A person who becomes so involved tampering with drugs and their quantities to make up for those pilfered or misappropriated cannot possibly avoid tragic mistakes. Personnel with low integrity, disciplinary problems, and moral shortcomings should not be allowed to function in the pharmacy.

5. Failure to doublecheck. All too often the belated excuse for error is "I thought it was thus and so" or "I didn't want to bother the prescriber with this" or, worse still, "I didn't want the prescriber to think I was stupid for asking." When in doubt, doublecheck and ask. Failing to do so can be tragic.

CHAPTER 5

PREVENTIVE MEDICINE

This chapter deals with many factors that contribute to the cleanliness and efficiency of naval activities as well as to the health and attitude of personnel. Maintaining the highest state of health and physical readiness of all Navy personnel is the responsibility of the commanding officer, who, in turn, looks to the Medical Department for advice, recommendations, and establishment of standards.

Prevention and control of disease have for many years been considered the most desirable route to good health. Material included in this chapter should provide you with a general knowledge of the principles and practices of the Navy's Preventive Medicine Program.

Two of the most important principles of preventive medicine are communicable disease and vector and pest control. For detailed information on these subjects refer to the *HM 3 & 2* Rate Training Manual.

SANITATION OF LIVING SPACES

A habitable and healthful environment must prevail in living and berthing spaces ashore and afloat to maintain the efficiency of naval personnel. Major factors pertaining to living and berthing spaces are sleeping arrangements, floor area, ventilation and air volume, heating, sanitary fixtures, and related features such as lighting and color.

The Medical Department representative makes recommendations to the commanding officer that will ensure the highest level of sanitation. This can best be accomplished through a program of inspections.

SANITATION MEASURES

Some sanitary measures are directed toward maintaining the environment as dust-free as possible. Toward this end, the use of soap and water and other cleaning agents has replaced the practice of "dry-sweeping." Excessive quantities of soapy water warp wooden floors, loosen inlaid tile and linoleum, and splash and foul bulkheads and equipment. Only if grease and grit are ground into the deck should a scrub brush and detergent be used. Generally, "mopping down" with a clean mop moistened with clean water and soap, followed by a second "mopping down" with a clean mop rinsed in clean water and wrung out, will produce clean floors or decks. Daily attention to the cleanliness of the paint work on stanchions and bulkheads is more desirable than vigorous cleaning at less frequent intervals.

Dry cleaning and laundering of textiles such as blankets, sheets, and mattress covers must be done frequently to keep the bedding as clean and dust-free as possible. Dirty bedding, bunk bottoms and lashings result in bad odors and provide ideal living and breeding conditions for insects. Mattresses for vacant bunks should be stored in a space or locker inaccessible to loungers. Washable fire-resistant covers are provided for each bunk to keep the bedding clean.

Drinking fountains should be cleaned at least once daily, with particular attention paid to the bowl, orifice, and orifice guard, to prevent accumulation of slime. Drinking fountains should be of the angle-jet type.

Toilet stools, urinals, lavatories, and showers should receive a thorough cleaning daily. This should include not only the inner and outer

102

surfaces, but also all connecting pipes, valves, and other plumbing adjacent to the fixtures. Failure to properly clean these areas results in discolorations and foul odors. Thorough cleaning usually makes the use of deodorant blocks unnecessary. Failure to clean in the area of lavatories and showers results in unattractive accumulations of soap scum, scale, dust, fungus, or mold.

Mops, brooms, brushes, and rags should be thoroughly cleaned and then stowed after each use.

All trash cans in living and berthing spaces should be provided with tight-fitting covers and be cleaned inside and out at least daily.

Bedding, including mattresses, should be aired outdoors at frequent intervals.

Mattresses must be used with covers, otherwise they become permeated with body grease, dirt, and discharges.

Mattresses that have been used by personnel with highly infectious diseases should be autoclaved. If facilities for autoclaving are not available, the mattresses should be surveyed and destroyed by burning.

When mattresses are dirty or in a poor state of repair, they should be cleaned, renovated, or replaced as soon as possible.

HEATING, VENTILATION, AND AIR CONDITIONING

GENERAL

The major objectives of heating, ventilation, and air conditioning are to maintain physical fitness, mental alertness, fighting ability, and the general well-being of personnel ashore and afloat. This should include consideration for the stresses of frequent watches, prolonged cruising, and battle or general quarters situations. The design and maintenance of environmental control systems should ensure useful productivity and recovery from undue physical stress rather than thermal comfort alone.

In addition, environmental control systems must ensure that the air in confined spaces contains no harmful components and has sufficient quantities of oxygen.

Special use areas, such as selected Medical Department spaces and those containing equipment and material that require individually controlled surroundings, must be designed to guarantee optimum mission performance under variable environmental conditions.

The problems encountered in maintaining optimum habitability aboard naval vessels can be realized if we consider the many factors involved. The heating, ventilation, and air-conditioning systems must be designed for a wide range of climatic conditions ranging from arctic to tropical. The structural integrity of the ship must be preserved and penetration of watertight structures kept to a minimum. In spite of this, fresh air and heat must be provided to various compartments often far removed from the source of supply.

These problems are further complicated by the lack of uniformity of ventilation or heat demands in the various parts of the ship. Spaces exposed on one or more sides to the prevailing weather may have a high rate of heat gain or loss. Inside spaces may be subject to the effects of "wild heat," that is, uncontrolled or waste heat generated by machinery, boilers, galley stoves and ovens, and the like. Thus, adjacent compartments may vary to such an extent that one requires heating while the other needs cooling.

STRESS AND STRAIN

The thermal (heat or cold) stress of any working situation is the combination of all factors that result in a gain or loss of body heat or that prevent the body's regulatory mechanism from working properly. Environmental physiologists use the term "stress" to designate the force or load acting upon the biological system and the term "strain" to designate the resulting distortion of the biological system. Thermal stress factors are heat, cold, humidity, radiation, air movement, and surface temperature. Thermal strain manifests itself in specific cardiovascular, thermoregulatory, respiratory, renal, endocrine, and other responses that differ from accepted norms.

Thermal stress has been categorized as "acceptable" when a person is able to compensate without undue strain or "unacceptable" when a person is unable to compensate and incurs excessive strain. Thermal strains have been categorized as those interfering with work performance and safety and those with more overt manifestations such as heat rash, heat cramps, heat stroke, heat exhaustion, or freezing injuries.

DEFINITIONS

DRY-BULB TEMPERATURE (DBT). That temperature measured with an alcohol-in-glass thermometer whose bulb is kept dry and shielded from radiation.

WET-BULB TEMPERATURE (WBT). That temperature measured with a thermometer similar to that used for measuring DBT, except that a wet wick is fitted closely over the bulb (or sensor). A "natural" WBT is obtained with no additional movement of air over the wick other than that which occurs naturally. An "aspirated" WBT is obtained by increasing air movement over the wick with a fan, motorized psychrometer, or sling psychrometer. The "true" WBT environment is approximated when a moderate air flow is maintained and the bulb is shielded from radiant heat. Although the natural WBT depends on the DBT and the moisture content of the air, it does not provide a direct indication of the amount of water vapor in the air. The aspirated WBT is therefore of greater value in planning corrective action than the natural WBT. The term WBT will hereafter refer to aspirated WBT unless otherwise specified.

When the dry- and wet-bulb temperatures are identical, the air is said to be saturated, and the relative humidity is considered to be 100%.

HUMIDITY. The quantity of water vapor mixed with other atmospheric gases.

ABSOLUTE HUMIDITY (AH). The mass of water vapor present per unit volume of air.

RELATIVE HUMIDITY (RH). The ratio of the actual amount of water in the air (absolute humidity) to the maximum quantity of water the air can hold at a given temperature.

DEW POINT. The temperature at which the absolute humidity reaches a maximum and the air becomes saturated with water vapor.

PSYCHROMETER. An instrument for measuring atmospheric humidity using two thermometers, one with a wet bulb and one with a dry bulb, whirled manually or by motor to provide the moderate air flow necessary to obtain an aspirated WBT reading.

AIR MOVEMENT OR VELOCITY. Usually expressed in feet per minute (fpm) or cubic feet per minute (cfm). It is measured by various instruments depending on air flow velocity.

RADIANT HEAT. The transfer of thermal energy by wave motion from one object to another without warming of the intervening space.

VERNON GLOBE THERMOMETER. Consists of a 6-inch hollow copper sphere, with a wall 0.022 inches thick painted flat black on the outside, and containing a temperature sensor like that of an unshielded dry-bulb thermometer with the bulb, or its equivalent, at the center of the sphere.

WET-BULB GLOBE TEMPERATURE (WBGT) METER. A compact electronic instrument that independently measures dry-bulb, wet-bulb, and globe temperatures and air velocity.

INFRARED THERMOMETER. Used in measuring the temperature of infrared energy emitted from various sources.

EFFECTIVE TEMPERATURE (ET). An index combining into a single value the effects of temperature, humidity, air velocity, and thermal radiation. Combinations of conditions that produce the same subjective feeling of warmth in reference to still saturated air are assigned the same effective temperature.

MEAN RADIANT TEMPERATURE (MRT) of a nonuniform environment (e.g., walls, ceilings, floors). The temperature of a uniform black enclosure in which a solid body or an occupant would exchange the same amount of radiant heat as in the given nonuniform environment. It is estimated from the globe thermometer reading and is useful in determining radiative heat transfer (net gain or loss) in human beings.

HEATING

Aboard ship the conventional approach for heating involves drawing fresh outside air over steam coils and discharging the heated air into various compartments where it is required. To avoid condensation of moisture on the airducts and to provide a flexible heating system, outside air is initially preheated to 42°-50°F DBT. The air is then heated to the desired delivery zone temperature and distributed to the various compartments and spaces within that zone. A "heating zone" is defined as a group of adjacent spaces with approximately the same heating requirements.

A zone temperature of 70°F DBT is required aboard surface vessels for berthing, dressing, lounge, messing, medical, dental, office, and control spaces. No effort is made to control the moisture level in these spaces during cold weather; therefore, Medical Department personnel should anticipate increased symptoms associated with the drying of respiratory membranes among individuals working in these spaces.

Heating designs for submarines differ from those of surface vessels in that they provide regulated humidity for the living and control spaces noted above. Aboard submarines the temperatures should be as follows: DBT: 79°F, WBT: 59°F, RH: 50 %, WBGT: 63°F (as ET).

With the exception of the above, inside working spaces are usually maintained at lower temperatures, depending on the amount of physical exertion required of personnel working in those areas. These temperatures will be the minimum consistent with comfort.

VENTILATION

The purpose of ventilation is to remove toxic substances, offensive odors, and excessive heat and moisture, and to provide an adequate oxygen supply. Ventilation aboard ship is designed not only to prevent conditions that could lead to acute overheating, but also to maintain an atmosphere conducive to the physical and mental efficiency of personnel. It should be effective during normal operations and in the event of CBR warfare. Ventilation systems must be as flexible as heating systems. Hot weather cooling of given spaces by ventilation is planned so that the temperature within those spaces will remain below specified limits. These limits are determined by using as a base the highest anticipated hot weather (outside) temperature. For planning purposes this is defined as 90°F DBT and 81°F WBT.

Air circulation within compartments must be sufficient to eliminate "dead spaces." An adequate air exchange will ensure removal of odors and prevent the accumulation of moisture on environmental surfaces. Ventilation exhaust from sanitary spaces, food preparation and dining areas, sculleries, and garbage disposal areas must not be recirculated or introduced into other spaces. Ventilation of food preparation and laundry spaces must be balanced to provide a negative pressure within these areas to allow for a net inflow of air.

Cooling by ventilation is the process of diluting inside air with cooler outside air. It may prove of value aboard a ship in limiting excessive temperature from varied indoor sources (personnel, lighting, laundry equipment, machinery, poorly insulated piping in firerooms and enginerooms, etc.).

Obviously, ventilation alone will not usually cool spaces to a temperature as low as that of outside air. Firerooms and enginerooms require spot cooling, because these spaces produce so much "wild heat" that it is practically impossible to reduce the temperature of the entire space to that of a good working atmosphere. This method of cooling is accomplished by air supplied at a high velocity from ventilation ducts that concentrate their discharge on the watch stander's station. It maintains the immediate vicinity within the acceptable range despite the high temperature of the general area.

Keeping the ventilation system clean is very important. It has been estimated that a large naval vessel may take as much as 5 tons of dirt per day into its ventilation system. As the adhering material accumulates, the capacity of the system to deliver air is reduced. A cleaning schedule for the system should be established, with screens, heaters, and cooling coils receiving special attention.

AIR CONDITIONING

Mechanical cooling and dehumidifying of air aboard naval vessels is accomplished by passing air over coils and fins cooled with a refrigerant. As the warm humid air circulates over the coils, it loses heat and the moisture condenses on the fins. The conditioned air is then circulated through a ducting system to appropriate spaces and compartments. Cooling coils may be located in an air supply duct with the refrigerating unit and fan placed remotely, or the entire apparatus may be assembled into a single unit.

Air conditioning is frequently required in spaces containing precision instruments sensitive to extremes of temperature and humidity. Appropriate filtering will ensure air purity within required tolerance limits.

Mechanical cooling is a current feature of the living areas and office spaces of combat ships and most auxiliaries. When still commissioned, hospital ships were routinely air conditioned, with the improved recovery of patients taking precedence over the customary weight and space limitations.

"Cold shock," defined as rapid heat loss due to increased evaporation of sweat from the skin and damp clothing, may occur in personnel passing from heated areas into air-conditioned spaces. Chills and shivering are common manifestations. Personnel in this situation experience sudden dilation of superficial blood vessels and flushing. "Cold shock" may be minimized by regulating air-conditioned spaces so that the difference in temperatures between those spaces and heated or outdoor environments does not exceed 15°F DBT.

ADDITIONAL CONSIDERATIONS ABOARD SHIP

Mechanical air supply and exhaust systems are provided for most working and living spaces; the quantity for each should be balanced respectively within the major sections of a ship. Ventilation of spaces in which excessive heat or undesirable odors are produced requires a greater volume of mechanical exhaust than supply ("negative pressure") to maintain an induced air flow into the compartment and to prevent the spread of heat and odors to adjacent spaces. Compartments used for living and berthing should be provided with a greater volume of mechanical supply than exhaust ("positive pressure") to maintain an induced airflow out of the space and thus to prevent the entrance of contaminated air from adjacent spaces.

Ventilation and air-conditioning designs for living, working, and electronics equipment spaces aboard surface vessels should minimize heat stress and enhance performance in hot and subtropical climates.

Effects of Air Movement

In still air the body is enveloped by a layer of warm, moist air resulting from body heat and the evaporation of perspiration. A controlled air movement removes this layer and adds greatly to the feeling of comfort. High-velocity air blowing from the overhead onto the heads of occupants is undesirable except in hot atmospheres. Such an air stream directed against exposed skin becomes uncomfortable to intolerable in many hot environments. In hot weather use bracket fans for high local circulation.

Additional requirements and standards for shipboard heating, ventilation, and cooling may be found in NAVMED P-5010, the Manual of Naval Preventive Medicine, chapter 3, and OPNAVINST 5100.20 series.

FOOD SERVICE SANITATION

One of the most demanding and vital tasks of naval preventive medicine is ensuring proper handling of food in its many phases from the point of production to final consumption. Carelessly handled food is easily contaminated and will readily support the growth of pathogenic organisms that may lead to illness.

RESPONSIBILITIES

Chief, BUMED. Establishes sanitary standards for food procurement, inspection on delivery, fitness for human consumption, storage and refrigeration, preparation and serving, and disposal of food remains.

Navy Environmental Preventive Medicine Units. Provide specialized consultation in preventive medicine and environmental health in the following areas:

- Evaluation of food sanitation training programs
- Surveys and recommendations on insect and vector problems
- Laboratory services
- Epidemiologic investigation of foodborne illness

Commander, Naval Facilities Engineering Command. Responsible for planning, designing, and constructing all shore dining facilities.

Commander, Naval Sea Systems Command. Responsible for designing, constructing, and maintaining dining facilities afloat.

Commander, Naval Supply Systems Command. Administers the Naval Food Service Program.

Commandant, Marine Corps. Administers the food service program for the Marine Corps.

Individual Commands. The commanding officer of each individual command has the ultimate responsibility for ensuring that food and beverages served within his or her jurisdiction are safe and wholesome. However, guidance and support in food service sanitation must be provided by the Supply and Medical Departments.

PROCUREMENT, INSPECTION, AND STORAGE OF FOODSTUFFS

Procurement

The Department of Defense has designated the Defense Personnel Support Center (DPSC) of the Defense Logistics Agency (DLA) as the organization responsible for the procurement of food items for the Armed Forces. Most food items are procured through contracts let by Headquarters, DPSC, Philadelphia, or regional headquarters located in major marketing areas in the United States.

All foods for the enlisted dining facilities must be procured in accordance with Federal and military standards. Except in emergencies, local purchase of food items by naval activities within the United States are limited to fresh bakery items, fresh dairy products, and items designated for local purchase in the Federal Supply Catalog.

Inspection

All foodstuffs procured for the Armed Forces undergo rigid inspections and are subject to various Federal and military specifications covering sizes, grades, appearance, and type. These inspections are performed by DPSC quality assurance representatives (QARs), U.S. Department of Agriculture (USDA), U.S. Department of Commerce (USDC), technically qualified inspectors employed by Navy activities and organic to the command, Navy receiving officers, and medical officers and their designated representatives. Army veterinarian personnel are also available to assist Navy commands in some geographical areas.

Responsibilities

- The supply officer is responsible for procuring, receiving, inspecting, and storing foodstuffs.

- The food service officer is in charge of the food service division in a command. He or she is accountable for foodborne illness resulting from improper food preparation, serving or storing. Other responsibilities include:
  - Ensuring cleanliness of all food service equipment and spaces.
  - Supervising personal hygiene practices by food service personnel.
  - Ensuring sanitary food preparation, serving, and storage.

- Setting up initial and refresher training programs for all food service personnel.

- The medical officer or the Medical Department representative is responsible for:

  - Routine inspection of all food service facilities at least twice monthly.
  - Sanitary inspection of all Navy and Marine Corps commissaries.
  - Inspection of foodstuffs for fitness for human consumption and for assurance that they are from approved sources.
  - Physical examination of food service personnel.
  - Sanitation training programs (initial and refresher).

Meals served in the enlisted dining facility must be sampled regularly by an officer detailed by the commanding officer (usually the officer of the day).

Occasionally, food items are received that have not been inspected by technically qualified personnel. All food items delivered directly to the dining facility by vendors will be accepted by food service personnel and inspected in accordance with the NAVSUP Manual.

Food about which there is any doubt must be rejected as unfit for human consumption. To avoid the risk of foodborne illness observe the old adage "When in doubt, throw it out."

The medical officer is responsible for ensuring that all food served in the command's enlisted dining facility is fit for human consumption. If any food appears questionable or has been purchased on the local market or under contracts requiring inspection at destination, the food service officer must request an inspection. The medical officer or the designated representative will perform the inspection and submit samples for laboratory analysis in accordance with the Manual of Naval Preventive Medicine.

Medical Department personnel concerned with food inspections ashore should maintain liaison with local personnel of the military veterinary services or USDA inspectors to keep current on the information and techniques involved in such inspections.

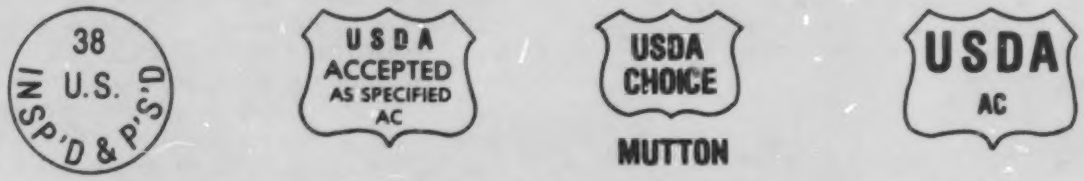
Food inspections afloat should be made jointly with the supply officer or the designated representative if a combination of knowledge and training can result in an effective inspection program.

Meats

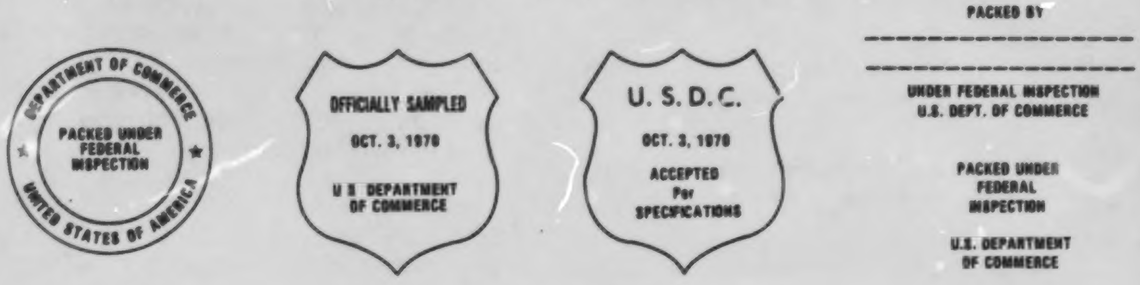
The Federal Meat Inspection Act and the Poultry Products Inspection Act require a USDA official to inspect all meats, meat products, poultry, and poultry products intended for interstate shipment. All such products prepared in the United States and purchased by the Armed Forces must have originated in plants under the supervision of the USDA or USDC and be so marked with their stamp of approval. Various stamps are shown in Figure 5-1. The stamp indicates that the condition of the product met with Federal regulations at the time of packing. The markings do not attest to the quality of the product. Criteria by which various meats are judged may be found in the NAVSUP Manual or NAVSUP 421.

Fish and Shellfish

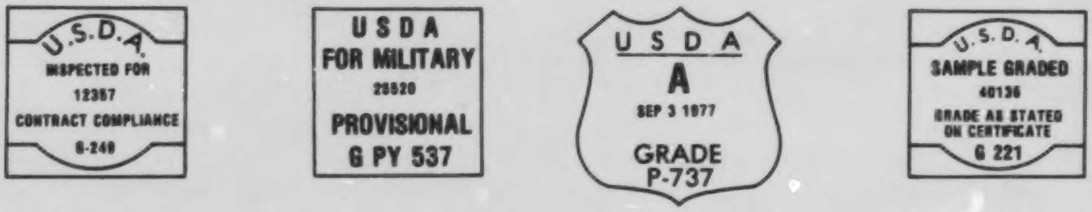
The Fish and Wildlife Act provides for USDC inspection of processed fish and shellfish products. All such products prepared in the United States and purchased for enlisted dining facilities originate from plants under the supervision of the National Maritime Fisheries Service


38
U.S.
INSP'D & P'S'D
USDA
ACCEPTED
AS SPECIFIED
AC
USDA
CHOICE
MUTTON
USDA
AC

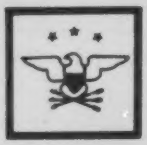
Federal inspection marks for meat and meat products


DEPARTMENT OF COMMERCE
PACKED UNDER
FEDERAL
INSPECTION
UNITED STATES OF AMERICA
OFFICIALLY SAMPLED
OCT. 3, 1970
U S DEPARTMENT
OF COMMERCE
U. S. D. C.
OCT. 3, 1970
ACCEPTED
For
SPECIFICATIONS
PACKED BY
UNDER FEDERAL INSPECTION
U.S. DEPT. OF COMMERCE
PACKED UNDER
FEDERAL
INSPECTION
U.S. DEPARTMENT
OF COMMERCE

Federal inspection marks for fishery products


U.S.D.A.
INSPECTED FOR
12357
CONTRACT COMPLIANCE
G-240
USDA
FOR MILITARY
25520
PROVISIONAL
G PY 537
USDA
A
SEP 3 1977
GRADE
P-737
U.S.D.A.
SAMPLE GRADED
40136
GRADE AS STATED
ON CERTIFICATE
G 221

Federal inspection marks for poultry and poultry products



Department of Defense Inspection Stamp

159.22

Figure 5-1.—Meat and Poultry Inspection Stamps.

and are marked with the USDC stamp (figure 5-1).

Each container of unshucked shell stock will be identified by an attached tag that states the name of the shell stock shipper, the kind and quantity of shell stock, and the official certificate number issued according to the law of the jurisdiction. Fresh and frozen shucked shell stock will be packed in nonreturnable containers and marked with the name and address of the shipper, packer, and shucker, and the official certificate number. Shellfish must be kept in the original container until used.

Fish must be checked carefully. Refrozen fish will not be used. Fish that has been refrozen will be soft and discolored and have a sour odor; the wrapping paper may be moist, slimy, or discolored and the bottom of the box distorted.

Fresh fish have bright red gills, prominent clear eyes, and firm elastic flesh. Stale fish are dull in appearance, have cloudy and red-bordered eyes and soft flesh. Finger impressions are easily made and will remain when pressure is released. Fish caught over the side at sea will not be used unless there is absolute certainty that they are not poisonous, since cooking does not destroy the poisonous alkaloid in fish.

Fresh crustaceans must be alive to be acceptable. When inspecting crab, lobster, or shrimp, organoleptical procedures (testing with the senses) must be used to determine fitness for human consumption.

Fruits and Vegetables

Fresh fruits and vegetables must be inspected upon receipt for wholesomeness. The inspection is based upon USDA standards. Minimum requirements for the various grades are defined in chapter 1, Manual of Naval Preventive Medicine.

Canned Goods

Canned goods should undergo an inspection to assure the physical state of the containers. When inspecting canned products, the following should be taken into consideration:

- Can labels—the information stamped on the end of each can will be checked to ensure that contents and date of pack are indicated.

- Can exterior—general appearance (dents, rust, swelling, leakage).

- Contents—odor and taste indicate the condition of the contents. Faded color, loss of flavor, and soft texture are undesirable natural results of aging and chemical action.

Except for coffee and molasses, foods in cans with the following defects are unacceptable and must be surveyed.

- Pinholes—cans with tiny holes caused by the action of acid.

- Flipper—a can with flat ends, one of which may be forced into a convex position when the other is brought down sharply on a flat surface. It indicates a loss of vacuum due to the formation of gas by bacteria or chemical action on the metal of the can. Regardless of the cause, the contents must not be used.

- Springer—a can with one or both ends slightly bulged but yielding to finger pressure. When the pressure is relieved, the ends will again bulge. This condition may be caused by overfilling or by chemical or bacterial action creating gas. Coffee is an exception as the bulging ends are usually an indication of a properly sealed container retaining its natural gases.

- Sweller—Both ends of this can bulge out and remain that way. This is indicative of advanced deterioration. Molasses is an exception. Cans of molasses that bulge at the ends are not unusual, particularly in tropical climates. Microorganisms cannot exist due to high sugar content.

Canned foods that are abnormal in apperance or odor must not be eaten, or even tasted. They must be discarded. If large quantities are involved, a representative package must be submitted for bacteriological analysis.

Dry Food Items

Dry food items, other than canned goods, are cereals, sugar, dried fruits, vegetables, flour, and meal. They must be stored under controlled conditions of temperature, humidity, and air circulation.

Torn or broken containers may be exposed to rodents or insects. Rolled oats or other cereal containers may have broken and the food become contaminated. Dried fruits and vegetables may become damp and moldy. Dockside inspection of these items is recommended to avoid taking pests such as cockroaches into the ship or storage facilities and thus to prevent recurring infestations.

Butter, Cheese, and Eggs

Butter, cheese, and eggs spoil quickly under improper storage conditions. The method of handling and the storage temperatures must be correct. These products must be checked carefully upon delivery and frequently thereafter.

Butter should be received in clean, unbroken cases. For quality, it is best to taste samples for sweetness and freshness. The color should be uniform and the texture firm. Specks or foreign substances should not be present.

The rind, color, flavor, and texture of cheese should be checked. Cheese may be received in either natural or processed form. The rind should be clean and free from mold or wrinkles. In good cheddar cheese the color should be evenly distributed. This can be determined by holding a thin slice up to a light. The flavor of good cheese is clean and nutty and the texture compact and solid.

Various types of eggs including fresh, frozen, and dehydrated are procured for different conditions and uses. Fresh eggs (not over 30 days old) that have been held at a temperature of 32°F in a dry, ventilated place are preferred. Eggs stored at room temperature or allowed to remain at room temperature rapidly lose their quality. Fresh processed eggs have been preserved by dipping for a few seconds in warm mineral oil at 100°-110°F or by treating with other processing fluids. This treatment helps retard shrinkage due to evaporation and also destroys molds and bacteria, thereby prolonging the storage life of the eggs. Processed eggs should also be stored in a cool (32°F), dry ventilated area. Both dehydrated and frozen eggs are used for making scrambled eggs and omelets or for baking purposes.

Storage

Correct storage procedures play a major role in preventing foodborne illness and increasing the storage life of foods. Proper temperatures, air circulation, and humidity retard food spoilage and growth of pathogenic organisms. Stock rotation reduces spoilage, and adequate pest control reduces infestation and damage caused by insects and rodents.

High levels of sanitation and safety must be maintained in all food storage facilities. Food items must be palletized or placed on shelves in a manner that is safe, facilitates proper cleaning, promotes adequate air circulation, and prevents insect and rodent harborage. To prevent food spoilage, foods are rotated so the oldest items are used first.

Semiperishable Food Items

The term "semiperishable" refers to foodstuffs that are canned, dried, dehydrated, or otherwise processed so they may be stored in nonrefrigerated spaces. Storerooms should be clean, dry, well ventilated, and inspected regularly for cleanliness. The foodstuffs should be checked for spoilage or damage. Semiperishable food will not be stored near steam or other heated pipes. Bagged items must be stored off the deck to facilitate cleaning and air circulation.

Semiperishable food must be considered overaged when stored beyond the inspection test date marked on the case or the keeping time shown in the semiperishable food storage table in NAVSUP 486.

An overage item is still usable if the container is in good condition and the food has no offensive odor or appearance. Items will not be surveyed solely because of age. They must be inspected by a qualified inspector, and if found fit for human consumption the shelf life will be extended. Extended food items are consumed as soon as possible.

When inspecting storerooms, check the outward appearance of food containers and the condition of food. Torn or broken bags of flour, meal, sugar, and the like will be surveyed or stored in insect-proof containers. If an insect infestation is discovered, such as weevil-infested flour or grain, specimens of the insects should be carefully collected and sent to the nearest military facility having the capability to identify insects.

Fresh and Frozen Food Items

Fresh and frozen food items including dairy products, eggs, fish, fruits, meats, and vegetables are highly perishable and require proper storage temperatures, humidity, and air circulation. To promote proper air circulation these items must be stored on pallets away from bulkheads and cooling coils, with a minimum 2 feet of clearance between tops of stacks and air ducts. Generally, when the recommended temperatures are uniform in all areas of the refrigerator or freezer, air circulation is considered adequate.

Fresh fruits and vegetables stored in a tight compartment at 40°F or above produce a high concentration of carbon dioxide due to the respiration of the produce. In some instances levels of carbon dioxide may become unsafe for work. Under such conditions the levels of CO_2 will be checked by qualified personnel before entry, and an adequate supply of fresh air will be introduced into the space.

Meats, meat products, poultry, and poultry products must be stored in areas that offer proper air circulation to maintain the desired temperatures throughout the storage space. Meat and meat pans must not be stored on the deck.

With the exception of medical supplies that must be refrigerated and maintained under separate lock and key, only food may be stored in food storage spaces. Foods that readily absorb foreign ordors, such as eggs and butter, should not be stored with fruits and vegetables. Decayed or otherwise spoiled food items must not remain near items that are still wholesome. Food and food containers must be stored at least 2 inches off the deck and away from bulkheads or other items that may impede adequate air circulation.

Stores should be inspected for the presence of insects before they are placed in the storeroom.

Refrigerated storage spaces (including milk dispensers, refrigerated display cases, refrigerated salad bars, reefers, and freezers) are maintained as follows:

The temperatures must be held within the appropriate ranges given in table 5-1 and the relative humidity maintained between 85% and 90%.

Frost or glaze ice must not be allowed to accumulate to more than 3/16 of an inch on interior surfaces or refrigeration coils.

Interior surfaces must be routinely washed with warm water and hand dishwashing detergent and rinsed with warm water in accordance with the manufacturer's instructions.

At least one easily readable and readily accessible thermometer, accurate to within plus or minus (±) 3°F, must be provided in all refrigerated storage spaces.

Temperature logs must be maintained for all bulk cold storage spaces. Accurate entries are made at least twice daily.

Food items that have been removed from their original containers and stored in refrigerated spaces must be covered with aluminum foil, wax paper, or plastic. All food

Table 5-1.—Temperature Requirements for Refrigerated Spaces

Refrigerated Storage Space	Temperature Range
Freezers	0°F (-17.7°C) or lower
Dairy Product Boxes	32°F (0°C) to 34°F (1.1°C)
Chill Boxes	32°F (0°C) to 35°F (1.7°C)
Thaw Boxes	36°F (2.2°C) to 38°F (3.3°C)

containers must have labels indicating the contents, and in the case of prepared foods the date and time of preparation will be included.

For guidance ashore and afloat, tables of safe keeping times, proper storage temperatures, and storage life of perishable and semiperishable items see NAVSUP 486, volume I, chapter 5.

Milk and Milk Products

Milk and milk products have a Jekyll and Hyde reputation. Milk is most valuable to the nutritional well-being of the individual, but if not properly safeguarded it will be instrumental in transmitting disease. Strict surveillance of all handling procedures is necessary to prevent contamination.

The perishability of milk and milk products is a most important factor, thus strict compliance with all sanitary requirements is mandatory. Of prime importance to medical and supply department personnel are maintaining recommended temperatures in storing and dispensing, and enforcing approved sanitary methods in the handling of such products. The following definitions will help you understand milk processing.

Homogenization—The process of passing milk through a homogenizer, which breaks up milk fat and protein, blending cream, water, and milk solids, and preventing separation.

Pasteurization—The process of heating milk or milk products to at least 145°F and maintaining this temperature for at least 30 minutes, or to at least 161°F and maintaining this temperature at least 15 seconds in approved and properly operated equipment, or any other pasteurization technique recognized by the U.S. Public Health Service (USPHS). Milk products having a higher milk-fat content than milk or containing added sweeteners must be heated to at least 5°F above the minimum pasteurization temperature noted.

Ultra-high-temperature processed—The process of aseptically packaging milk in containers and bringing it to an ultra-high temperature for a short period of time.

Milk and milk products, to be acceptable for serving at Navy and Marine Corps dining facilities ashore and afloat, must originate from an approved source. These sources are in NAVSUPINST 4355.4 series, Directory of Sanitarily Approved Establishments for Armed Forces Procurement. Also acceptable is an establishment having a pasteurization plant compliance rating of 90 or more, as certified by a State milk sanitation rating officer.

When performing delivery inspections, Medical Department personnel must ensure that milk and milk products are from an approved source and delivered in containers that are in good condition and properly sealed; that milk and milk products are organoleptically acceptable; and that the temperature of the product on delivery is 45°F or below. Vehicles used in the transportation of milk in its final delivery containers must be clean and constructed with permanent tops and sides. Block or crushed ice on the tops of milk cartons for refrigeration or cooling during delivery or on the serving lines is prohibited.

Single-service containers of milk and milk products must be refrigerated at temperatures below 45°F until served.

All milk and milk products dispensed from bulk milk dispensers must be homogenized. Temperatures in the dispenser cabinet must range between 38°-44°F while milk containers are stored within. A thermometer is an integral part of the dispenser cabinet. Multiuse dispenser tubes are prohibited. Single-service dispenser tubes will be cut with a sanitized cutting instrument to 1/4 inch beyond the termination of the dispensing mechanism. Bacteriological examination of milk and milk products must be made routinely and whenever contamination or contract nonconformance is suspected.

When the pitcher method of recombining and dispensing milk is used, pitchers must be cleaned and sanitized before use. Only cool, potable water will be used for reconstituting, and milk will be dispensed only from corrosion-resistant stainless steel or glass pitchers washed and sanitized after each use. Milk remaining in the pitcher after a meal period must be used within 36 hours for cooking purposes only or be discarded.

Ice Cream and Ice Cream Mixes

Ice cream served in Navy and Marine Corps dining facilities must be from approved sources and meet Federal and military standards. If prepared locally from a mix, only potable water will be used. The freezer must be cleaned after each day's operation. Bulk ice cream and other bulk frozen desserts are not authorized for self-service. All utensils including spoons, spatulas, dippers, and scoops used for dispensing ice cream must be kept either in running potable water or potable water that is changed several times during operation. To minimize health risks, only one person per watch section will make ice cream. Ice cream will be stored at temperatures of 0°F or lower.

FOOD SERVICE PERSONNEL

Food service personnel are a most important link in the transmission of disease through foods. The health and personnel habits of food service personnel and the methods of preparing and serving foods are vital factors. Health standards for food service personnel are discussed in the *HM 3 & 2* Rate Training Manual.

SANITARY PRECAUTIONS FOR PREPARING AND SERVING FOOD

Food poisoning and the spread of foodborne illness would be eradicated if food were procured from approved sources and processed, prepared, and served according to recommended sanitary practices. Most foodborne illnesses can be traced to one or more of the following:

- Food prepared too far in advance of serving time
- Poor refrigeration
- Disregard of time and temperature factors
- Poor personal hygiene practices
- Food service personnel who are ignorant of or careless in applying recommended techniques

Even with exact care and handling, most uncooked foods harbor some microorganisms. Their growth can be prevented or retarded through proper temperature control. Only the quantity of food that will be consumed at each meal should be prepared, and hot foods should be kept hot and cold foods cold.

Do not return open jars or bowls of mayonnaise and salad dressing from salad bars to refrigerators for reuse at later meals.

When leftovers or warm foods are to be chilled, ensure prompt and thorough chilling to the center of the food mass (40°F or lower). Foods to be refrigerated should be placed in shallow pans of not more than 3 inches in depth and covered with lids, waxpaper, or other appropriate covers. Food to be chilled should immediately be placed in the chill box and labeled with the time and date. Leftover foods must not be held longer than 36 hours.

Foods that were cooked and then refrigerated must be rapidly heated through to 140°F or above before being placed in a hot food storage container. Steam tables, warmers, and other food holding facilities must not be used for rapid heating.

Ground or chopped food that is to be cooked later or incorporated into a recipe must be refrigerated immediately in covered shallow pans not more than 3 inches deep.

Cut, sliced, or diced meats must be refrigerated immediately in shallow containers not more than 3 inches deep.

Green vegetables of uncertain origin or suspected of being contaminated must be chemically sanitized by immersion for at least 15 minutes in 100 parts per million (ppm) free available chlorine solution or 30 minutes in 50 ppm free available chlorine solution. These items must be thoroughly rinsed with clean, potable water before use. Head items such as lettuce, cabbage, and celery must be broken apart before they are sanitized.

Frozen Foods

Frozen foods are subject to deleterious quality changes in color, texture, odor, flavor, and nutritional value if improperly packaged, frozen, stored, or thawed. The proper procedures for managing frozen foods include

114

sealing the foods in moisture- and vapor-proof containers or wrappers to prevent dehydration and freezer burn. Other measures are freezing foods in process freezers designed to cool bulk foods quickly to reduce chemical and biological deterioration, and storing the foods at a constant temperature not above 0°F.

Frozen foods must be thawed in a refrigerated space. Once thawed, frozen foods must not be refrozen. Thawing by exposure to excessive heat is prohibited. Likewise, thawing by immersion in water or with the use of fans is prohibited. Frozen meats must be thawed gradually at temperatures of 36°-38°F and used as soon as possible thereafter. Frozen foods may be thawed in the galley or meat preparation space on board ship at room temperature if thaw boxes have not yet been installed and if no refrigeration space is available for this purpose. When frozen foods are thawed by this method, the temperature must not exceed 80°F, items must remain in their original containers while thawing, precautions must be taken to ensure that foods are not allowed to remain at room temperature once thawed, and the Medical Department representative (MDR) must be notified of the thawing procedures. Frozen foods may be thawed in microwave ovens provided they are fully cooked immediately thereafter as part of the continuous cooking process.

Freezing leftovers is prohibited. This includes meat sauces, casseroles, and the like. Reconstituted and dehydrated foods are as susceptible to bacteria and spoilage as fresh items. Dehydrated foods must be refrigerated or cooked immediately after reconstitution.

Sandwiches

Due to the method of preparation, types of filling, handling, and storage procedures, sandwiches are potentially hazardous food items. The following requirements are therefore necessary.

Sandwiches not prepared at the activity will be procured from an approved commercial source. They must be freshly prepared and the time between preparation and consumption held to a minimum. Sandwich fillings containing meat, meat products, eggs, poultry, poultry products, and fish that are to be held longer than 3 hours before consumption must be prepared at room temperatures of 80°F or below and refrigerated until consumption. Sandwiches that contain protein fillings exposed to temperatures between 40°-140°F must be consumed within 3 hours or disposed of.

Mayonnaise, catsup, and other condiments, including pickles, are issued as separate items and not included in the sandwich. Sandwiches must be individually wrapped.

Chilled and frozen sandwiches are categorized as follows:

Class I—Sandwiches containing meat, cheese, salad fillings, and leftovers. These sandwiches are prepared and refrigerated daily and normally dispensed over the counter, in mobile food service trucks, or in refrigerated vending machines.

Class II—Frozen sandwiches intended for use in flight or boat meals. These sandwiches are prepared in enlisted dining facilities and are authorized only when the preferred method of handling special meals is not feasible. The following special requirements apply to class II sandwiches:

- Only freshly prepared sandwiches containing suitable ingredients for freezing will be used.
- Each sandwich will be individually wrapped and sealed in a double thickness of polyethylene film, waxed paper, or other moisture-proof material.
- Immediately after wrapping, sandwiches will be frozen to a temperature of 0°F or below and maintained at that temperature.
- Frozen sandwiches must be consumed within 5 hours after removal from the freezer. Each sandwich will be labeled at the time of issue with the time and date; for example, "Consume by ______"

Class III—Frozen sandwiches produced in a commercial frozen food operation in which a central kitchen is designed specifically for mass sandwich production. Each sandwich is hermetically sealed and frozen to 0°F or below and maintained at that temperature during transportation and storage. These sandwiches are limited to bread, meat, and cheese portions and condiments not considered potentially hazardous foods, such as mustard.

Frozen sandwiches are subject to the same requirements for thawing as other frozen foods. Outdated sandwiches must be discarded. Each sandwich must be labeled, marked, or stamped with the date and time of preparation and a "pull date." In addition, each carton or case of sandwiches must be stamped or affixed with the name and address of the processor and the preparation date.

Pastries

Cream puffs, custard filled cakes and pies, eclairs, and similar products must be prepared under strict sanitary conditions, covered, cooled quickly, and refrigerated until used. These items are highly perishable and provide ideal breeding grounds for pathogenic organisms. Only the quantity that will be consumed at each meal period will be prepared or procured. They must remain under refrigeration while on the serving line, and any leftover items must be discarded as garbage.

Other Foods

Information concerning salad bars, serving lines, and self-service items is contained in the Manual of Naval Preventive Medicine, chapter 1.

STANDARDS AND SANITATION OF FOOD SERVICE EQUIPMENT AND UTENSILS

All equipment and utensils used in food service facilities under Navy and Marine Corps jurisdiction must be made of sanitary, nontoxic, corrosion-resistant materials. They must be designed, constructed, and installed to provide for ease of cleaning. Such equipment must not contain inaccessible spaces. All such spaces must be sealed to prevent the entrance of food particles and vermin. Equipment and utensils must be constructed for easy maintenance. Food service personnel cannot be expected to maintain sanitary standards if equipment or utensils cannot be easily cleaned because of improper construction or deteriorated condition, if special or unusual handling and dismantling tools are required, or if the labor is exceedingly tedious, heavy, or time-consuming. For food service equipment to comply with Navy sanitary standards, Medical Department personnel must be consulted prior to local procurement and installation. Equipment must be installed at least 6 inches (8 inches aboard ship) from walls, floors, and adjacent equipment; or sealed to the wall, floor, and adjacent equipment on all sides.

All food service spaces and equipment must be free from salt water connections and cross-connections and have a nonpotable water supply and submerged fresh water inlets. Exceptions to the salt water requirement are shipboard spaces containing food waste disposers that have been specifically approved by BUMED for use with salt water during the food waste grinding or pulping process and approved refrigeration units that use salt water.

All surfaces that come into direct contact with food must be impervious, corrosion-resistant, and smooth. Cadmium plating, lead, and other harmful materials must not be used in food service equipment or utensils. Wooden paddles and other devices made of wood are likewise prohibited.

Dishwashing

General

Extensive tests have shown that many communicable diseases are transmitted by improperly washed and inadequately sanitized utensils and equipment. These items, including removable equipment components, may be washed by hand or machine; however, if available, machine dishwashing is preferred. Whatever method is used, the final results

11C

depend on the knowledge, skill, and conscientiousness of the dishwasher as well as the equipment and materials available. Equipment maintenance and properly trained operators are key elements to good dishwashing.

Contamination of clean and sanitized dishware can be prevented by eliminating cross-handling of soiled and clean items from splashes or sprays. The flow of dishware and utensils must be from soiled areas (scraping and preflushing) to clean areas (storage) to minimize the possibility of contamination from soiled articles.

Towel drying of dishware and utensils is strictly prohibited, as is the use of dishmops, sponges, or cloths for dishwashing. A sufficient amount of sanitary storage space must be provided to prevent contamination of clean and sanitized articles. Storage of dishware and utensils in sculleries that have approved salt water garbage grinders is prohibited. A sufficient supply of dining gear should be available to prevent the recycling of inadequately cleaned, wet, or hot dishware and utensils.

Approved procedures for both manual and machine dishwashing are contained in the Manual of Naval Preventive Medicine, chapter 1.

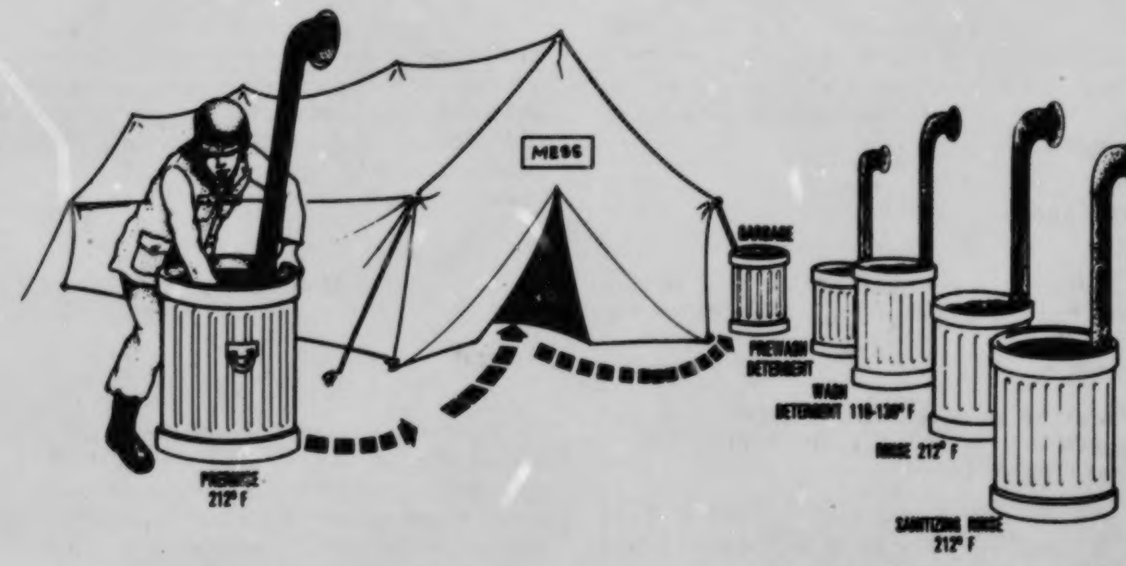
In the Field Dishwashing

The proper washing and sanitizing of mess gear and utensils used in the preparation and serving of food in the field is essential to the continuing health of the unit. This becomes particularly difficult since all unit members are expected to wash their own mess gear.

A model field dishwashing unit consists of five GI cans in a line as illustrated in figure 5-2.

Long-handled brushes are attached to the first and second wash cans. In actively boiling water, immersion for 30 seconds in the rinse cans is sufficient for sanitization and will promote rapid air-drying. An additional can may be added for prerinsing before eating; this water should be freely boiling.

With the additional pressures placed on individuals in the field environment, sanitization of mess gear may not receive proper attention. Consequently, close supervision in the washing area is required.



159.23

Figure 5-2.—Model Field Dishwashing Unit.

For more information on field sanitation practices, refer to NAVPERS 10819-B, Combat and Field Medicine Practice.

STANDARDS AND SANITATION OF FOOD SERVICE FACILITIES

All Navy food service facilities ashore and afloat must be maintained scrupulously clean, clear of refuse and garbage, and free of rodent and insect infestations. All floors, walls, ceilings, studs, joints, rafters, and pipes must be constructed to provide easy access for cleaning. Adequate light must be provided to all surfaces and equipment in food service spaces. All rooms must be adequately ventilated and air intake ducts and interiors of ventilation ducting cleaned at least quarterly to prevent accumulation of dirt and grease. Ventilation hoods and grease filters must be cleaned weekly to prevent fires. Meat cutting and preparation rooms at shore facilities must be air-conditioned and maintained at 50°F or below. The galley spaces aboard ship must be maintained at temperatures below 80°F.

At shore facilities garbage and refuse must be kept in leak-proof, nonabsorbent containers. Sufficient numbers of garbage and refuse containers are required to prevent overfilling. They must be provided with tight-fitting doors, lids, or covers and emptied as necessary during operation hours and at the end of each working day. Garbage and refuse on the premises must be stored in a location inaccessible to insects and rodents. Outside storage of garbage is prohibited except in garbage rooms. When garbage or refuse rooms are used, they should not be located within 100 feet of the food service facility. Garbage containers must be cleaned inside and out after they are emptied at the end of the day. Dumpsters and other large containers for storing garbage must be cleaned with high pressure water or steam at least twice a week during fly-breeding season and whenever necessary at other times.

Effective control measures to eliminate or control the presence of rodents, flies, cockroaches, and other vectors and pests must be maintained. The food service facility and its adjacent grounds must be kept free of litter and debris.

Report of Inspection

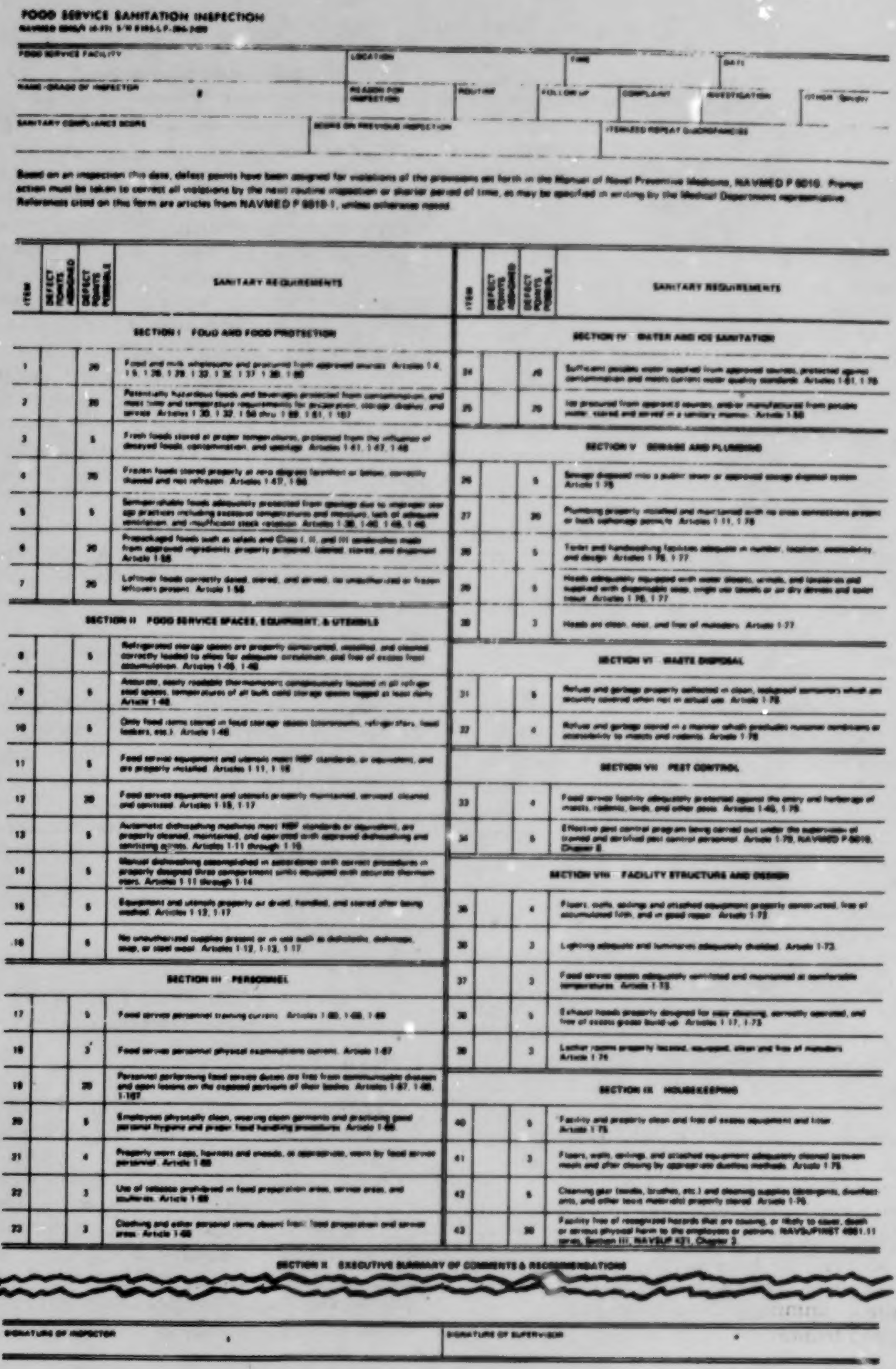
Navy and Marine Corps food service facilities will be inspected at least twice a month by a Medical Department representative along with the food service manager/officer or the designated representative. The findings of the inspection will be reported on NAVMED 6240/1. A sample form is shown in figure 5-3. A system has been established in which maximum defect points are awarded for each stated requirement. The inspector assigns an appropriate number of defect points up to the maximum possible and computes a sanitary compliance score (SCS). Complete step-by-step procedures for filing the report and computing the SCS are provided in the Manual of Naval Preventive Medicine.

When inspecting food service facilities and food items, use common sense and intelligence as a yardstick. The main objectives of an inspection are to discover discrepancies in food service operation and to prevent the spread of foodborne illness. To be meaningful, inspections must be conducted carefully, thoroughly, and competently, and then evaluated. Members of the Medical Department who provide inspection services must know what is proper and improper, and why. When they note a defect, they should explain why it is a defect, why it is dangerous, and what can be done to prevent or correct the situation. Authoritarian attitudes may alienate them from the personnel whose cooperation is essential to achieve high levels of sanitation.

WASTEWATER TREATMENT AND DISPOSAL

GENERAL

The proper disposal of waste materials is one of the most important measures for the control of waterborne diseases such as cholera and typhoid fever. The Federal Water Pollution Control Act Amendments of 1972 established the National Pollutant Discharge Elimination System (NPDES), which is a program to control water pollution in the nation's waterways by limiting the discharge of polluted effluents into waters from point sources.



FOOD SERVICE SANITATION INSPECTION
NAVMED 6240/1 [illegible]

FOOD SERVICE FACILITY	LOCATION	TIME	DATE
NAME-GRADE OF INSPECTOR	REASON FOR INSPECTION	ROUTINE FOLLOW-UP COMPLAINT INVESTIGATION OTHER (Specify)	
SANITARY COMPLIANCE SCORE	SCORE ON PREVIOUS INSPECTION	ITEMIZED REPEAT DISCREPANCIES	

Based on an inspection this date, defect points have been assigned for violations of the provisions set forth in the Manual of Naval Preventive Medicine, NAVMED P-5010. Prompt action must be taken to correct all violations by the next routine inspection or shorter period of time, as may be specified in writing by the Medical Department representative. References cited on this form are articles from NAVMED P-5010-1, unless otherwise noted.

ITEM	DEFECT POINTS ASSIGNED	DEFECT POINTS POSSIBLE	SANITARY REQUIREMENTS
			SECTION I FOOD AND FOOD PROTECTION
1		20	Food and milk wholesome and procured from approved sources. Articles 1-4, 1-5, 1-26, 1-29, 1-32, 1-36, 1-37, 1-38, 1-60
2		20	Potentially hazardous foods and beverages protected from contamination, and meet time and temperature requirements for preparation, storage, display, and service. Articles 1-30, 1-32, 1-54 thru 1-59, 1-61, 1-107
3		5	Fresh foods stored at proper temperatures, protected from the influence of decayed foods, contamination, and spoilage. Articles 1-41, 1-47, 1-48
4		20	Frozen foods stored properly at zero degrees farenheit or below, correctly thawed and not refrozen. Articles 1-47, 1-56
5		5	Semiperishable foods adequately protected from spoilage due to improper storage practices including excessive temperatures and moisture, lack of adequate ventilation, and insufficient stock rotation. Articles 1-38, 1-40, 1-45, 1-46
6		20	Prepackaged foods such as salads and Class I, II, and III sandwiches made from approved ingredients, properly prepared, labeled, stored, and dispensed. Article 1-58
7		20	Leftover foods correctly dated, stored, and served; no unauthorized or frozen leftovers present. Article 1-58
			SECTION II FOOD SERVICE SPACES, EQUIPMENT, & UTENSILS
8		5	Refrigerated storage spaces are properly constructed, installed, and cleaned; correctly loaded to allow for adequate circulation; and free of excess frost accumulation. Articles 1-45, 1-46
9		5	Accurate, easily readable thermometers conspicuously located in all refrigerated spaces; temperatures of all bulk cold storage spaces logged at least daily. Article 1-48
10		5	Only food items stored in food storage spaces (storerooms, refrigerators, food lockers, etc.). Article 1-46
11		5	Food service equipment and utensils meet NSF standards, or equivalent, and are properly installed. Articles 1-11, 1-16
12		20	Food service equipment and utensils properly maintained, serviced, cleaned and sanitized. Articles 1-15, 1-17
13		5	Automatic dishwashing machines meet NSF standards or equivalent, are properly cleaned, maintained, and operated with approved dishwashing and sanitizing agents. Articles 1-11 through 1-15
14		5	Manual dishwashing accomplished in accordance with correct procedures in properly designed three compartment sinks equipped with accurate thermometers. Articles 1-11 through 1-14
15		5	Equipment and utensils properly air dried, handled, and stored after being washed. Articles 1-12, 1-17
16		5	No unauthorized supplies present or in use such as dishcloths, dishmops, soap, or steel wool. Articles 1-12, 1-13, 1-17
			SECTION III PERSONNEL
17		5	Food service personnel training current. Articles 1-60, 1-66, 1-69
18		3	Food service personnel physical examinations current. Article 1-67
19		20	Personnel performing food service duties are free from communicable diseases and open lesions on the exposed portions of their bodies. Articles 1-67, 1-68, 1-107
20		5	Employees physically clean, wearing clean garments and practicing good personal hygiene and proper food handling procedures. Article 1-68
21		4	Properly worn caps, hairnets and snoods, as appropriate, worn by food service personnel. Article 1-68
22		3	Use of tobacco prohibited in food preparation areas, service areas, and sculleries. Article 1-68
23		3	Clothing and other personal items absent from food preparation and service areas. Article 1-68
			SECTION IV WATER AND ICE SANITATION
24		20	Sufficient potable water supplied from approved sources, protected against contamination and meets current water quality standards. Articles 1-61, 1-78
25		20	Ice procured from approved sources, and/or manufactured from potable water, stored and served in a sanitary manner. Article 1-60
			SECTION V SEWAGE AND PLUMBING
26		5	Sewage disposed into a public sewer or approved sewage disposal system. Article 1-78
27		20	Plumbing properly installed and maintained with no cross connections present or back siphonage possible. Articles 1-11, 1-78
28		5	Toilet and handwashing facilities adequate in number, location, accessibility, and design. Articles 1-76, 1-77
29		5	Heads adequately equipped with water closets, urinals, and lavatories and supplied with dispensable soap, single use towels or air dry devices and toilet tissue. Articles 1-76, 1-77
30		3	Heads are clean, neat, and free of malodors. Article 1-77
			SECTION VI WASTE DISPOSAL
31		5	Refuse and garbage properly collected in clean, leakproof containers which are securely covered when not in actual use. Article 1-78
32		4	Refuse and garbage stored in a manner which precludes nuisance conditions or accessibility to insects and rodents. Article 1-78
			SECTION VII PEST CONTROL
33		4	Food service facility adequately protected against the entry and harborage of insects, rodents, birds, and other pests. Articles 1-45, 1-79
34		5	Effective pest control program being carried out under the supervision of trained and certified pest control personnel. Article 1-79, NAVMED P-5010, Chapter 8
			SECTION VIII FACILITY STRUCTURE AND DESIGN
35		4	Floors, walls, ceilings and attached equipment properly constructed, free of accumulated filth, and in good repair. Article 1-73
36		3	Lighting adequate and luminaries adequately shielded. Article 1-73
37		3	Food service spaces adequately ventilated and maintained at comfortable temperatures. Article 1-73
38		5	Exhaust hoods properly designed for easy cleaning, correctly operated, and free of excess grease build-up. Articles 1-17, 1-73
39		3	Locker rooms properly located, equipped, clean and free of malodors. Article 1-74
			SECTION IX HOUSEKEEPING
40		5	Facility and property clean and free of excess equipment and litter. Article 1-75
41		3	Floors, walls, ceilings, and attached equipment adequately cleaned between meals and after closing by appropriate dustless methods. Article 1-75
42		5	Cleaning gear (swabs, brushes, etc.) and cleaning supplies (detergents, disinfectants, and other toxic materials) properly stored. Article 1-75
43		20	Facility free of recognized hazards that are causing, or likely to cause, death or serious physical harm to the employees or patrons. NAVSUPINST 4061.11 series, Section III, NAVSUP 421, Chapter 3

SECTION X EXECUTIVE SUMMARY OF COMMENTS & RECOMMENDATIONS

SIGNATURE OF INSPECTOR	SIGNATURE OF SUPERVISOR

159.24

Figure 5-3.—NAVMED 6240/1, Food Service Sanitation Inspection.

The Chief of Naval Operations promulgates Navy policy and assigns responsibilities concerning the prevention, control, and abatement of environmental pollution caused by naval ships and shore stations.

The Navy Surgeon General, through the occupational and preventive medicine services at NRMCs and Navy environmental and preventive medicine units, is responsible for evaluating wastewater disposal systems ashore and afloat to eliminate potentially hazardous conditions that could adversely affect the health of personnel.

The Chief of Naval Material, through the Naval Facilities Engineering Command and the Engineering Field Divisions, provides technical assistance on compliance with Federal law and the NPDES Permit System in wastewater disposal.

Individual commanding officers are responsible for ensuring the correct disposal and treatment of wastewaters.

The use of approved municipal or regional wastewater collection and disposal systems is the preferred method of disposal of wastes from shore activities. Accordingly, municipal or regional wastewater disposal systems are used by Navy shore activities whenever feasible.

Whenever use of a municipal or regional wastewater system is not possible or appropriate, the Navy must install and operate its own wastewater treatment and disposal facilities.

Sewage may be treated by a wide variety of methods using simple self-contained systems or sophisticated engineering systems.

Medical Department responsibility in ashore waste disposal consists of periodically inspecting wastewater treatment and disposal systems to detect potential health hazards to operators and the surrounding community. This effort includes being alert for any increase in disease among treatment plant operators or members of the surrounding community that may be attributable to exposure to human wastes.

Health precautions for personnel who work with wastewater treatment systems include:

- Keeping basic immunizations current. (Required immunizations include typhoid, polio, and tetanus.)

- Refraining from eating, drinking, or smoking when working with or inspecting equipment that may be a direct source of contamination.

- Wearing coveralls, rubber boots, and rubber gloves when cleaning up waste water spills or leaks. (On completion of cleanup, contaminated clothing must be removed and placed in plastic bags for laundering. Cleanup personnel should then shower as soon as possible.)

AFLOAT

The overboard discharge of untreated sewage within the navigable waters of the United States and the territorial seas (within 3 miles of shore) is prohibited by Federal law for all DOD ships. To comply with the law, naval vessels are being equipped with marine sanitation devices (MSDs) that either treat sewage before discharge or collect and hold it until it can be properly disposed of through dockside sewer connections or pumped overboard in unrestricted waters.

MSDs on Navy ships increase the potential for contamination of berthing and working spaces with raw sewage. Therefore, the Medical Department representative must be familiar with the wastewater disposal system and the procedures necessary to ensure the health and safety of the ship's crew.

There are basically three different types of MSDs, including zero discharge systems with full volume flush (FVF), zero discharge systems with reduced volume flush (RVF), and flow-through treatment systems.

The zero discharge system with FVF uses a standard 3- to 5-gallon flush and stores this wastewater in holding tanks until it is discharged. The zero discharge system with RVF also collects and stores the wastewaters until they are discharged. This system differs from the FVF system in that it minimizes the volume of wastewater. The flow-through treatment system treats the water to acceptable limits before it discharges the effluent into the receiving water. Effluent is defined as wastewater or other liquid, treated or untreated, flowing out of a reservoir, basin, sewage treatment plant, industrial treatment plant, or MSD.

MSD Systems

The collection, holding, and transfer (CHT) system is the MSD system installed on most naval vessels. It operates in restricted waters where the wastes are collected and stored in holding tanks; at sea the wastes are disposed of over the side; in port all waste is collected in holding tanks and subsequently discharged into a sanitary sewer or ship waste offload barge (SWOB) or held until the ship reaches unrestricted waters and then pumped over the side.

Other, less frequently encountered systems include the Evaporative Toilet System (ETS), the JERED Vacu-Burn Sewage Treatment System, the KOEHLER-Dayton (KD) Recirculating Flush,, and the Pall-Trinity Biological Treatment System. The operation and maintenance of these sewage handling and disposal systems are peculiar to the type of system installed. Such information may be found in the Ships Information Book (SIB) and the Manual of Naval Preventive Medicine, chapter 7.

Inspection of MSDs

MSD components (soil and waste drains, discharge lines, plugs, plates, valves, comminutors, motors, pumps, and tank penetrations and manholes) should be regularly inspected for leaks by engineering personnel. The "paper towel" test can be used to detect leaks from pumps, comminutors, and piping. This test entails opening a paper towel and holding it 2 to 3 inches from the unit for several minutes. Even the finest spray can be detected on the paper towel.

All leaks, spills, or other sources of contamination must be reported to the executive officer, the engineering officer/damage control officer, and the Medical Department representative. The leak must be repaired and the system properly cleaned and, if necessary, disinfected.

SEWAGE TRANSFER

Sewage receiving facilities are being constructed at all shore activites with fleet support capabilities. These facilities include sewer risers for the transfer of wastewater from the ship discharge risers to the shore sewer system. Facilities to store, maintain, and repair sewage transfer hoses are also included. Specific information and guidelines concerning all aspects of ship-to-shore wastewater transfer facilities and operations procedures are provided in NAVFAC MO-340, Ship-to-Shore Hose Handling Operations Manual.

Most Navy ship MSDs are designed to discharge their wastewater to a shore receiving facility when in port. This is normally done by connecting the ship sewage discharge risers directly to the pier sewage discharge risers.

Wastewater may be discharged indirectly through connections to a SWOB or another ship system, which in turn discharges the wastewater into pier sewer risers.

Most sewage connections, including ship-to-shore and ship-to-ship, are made by means of flexible transfer hoses 50 feet in length and 4 inches in diameter. On submarines these hoses measure 2 1/2 inches in diameter. It is the responsibility of the shore based handling crew to deliver sufficient quantities of sewage transfer hoses and to make connections to pier sewage risers. The ship's crew is responsible for all ship sewage riser connections.

Sewage transfer hoses must be kept clean and in good repair. After each use they must be flushed with high-pressure salt water for at least 10 minutes before they are disconnected and stored. Use of unapproved hoses and adaptors is prohibited due to the possibility of cross-connections with potable water lines. Under no circumstances will sewage transfer hoses be connected to potable water lines.

If wastewater is spilled onto the deck or pier during discharge, the affected area must be flushed with high-pressure salt water and disinfected if necessary.

As previously stated, sewage transfer hoses will normally be provided by the receiving activity. Sewage hose handling and storage facilities are designed to accommodate the repair, maintenance, and storage of transfer hoses. All hose handling and storage facilities are required to incorporate the following into their design and construction:

- Wooden racks and tables for handling and storage are prohibited.

- All windows and doors must be adequately screened to prevent entry of vectors.

- Back syphonage devices must be installed on all potable water lines used for flushing and cleaning sewage transfer hoses.

- Handwashing and shower facilities with hot and cold water, dispensable soap, and single use towels must be provided.

- All indoor work spaces must be well ventilated.

- The sewage hose handling and storage must be constructed, equipped, and operated IAW Occupational Safety and Health Administration (OSHA) standards.

PERSONAL HYGIENE, SANITATION, AND SAFETY

Observing good personal hygiene and sanitary practices is essential to prevent the spread of contamination and the resulting outbreak of disease aboard ship.

Personnel who come in contact with sewage wastes must wear protective clothing and observe the following rules to minimize contamination:

- Movement about the ship while wearing contaminated clothing must be kept to a minimum.

- Contaminated clothing must be placed in plastic bags and laundered as soon as possible following cleanup operations.

- Rubber boots, gloves, oxygen breathing apparatus (OBA) and other similar items must be cleaned with hot water and detergent and rinsed with an approved disinfectant solution. Personnel must thoroughly wash with soap and hot water as soon as possible before engaging in other activities.

Spaces that become contaminated with sewage as a result of leaks or spills or sewage system backflow must be thoroughly cleaned with detergent and water. In addition, food service spaces, berthing spaces, and medical areas must be treated with an approved disinfectant.

Bilges contaminated with sewage wastes must be pumped out, washed down, and pumped out again. If potable water tanks form the floor of the bilge, daily bacteriological monitoring will be performed until it is certain that the tanks are not contaminated. Furthermore, all potable water tanks suspected of contamination must be secured until the water is determined to be safe for consumption. Signs are posted in spaces containing MSD equipment warning against eating, drinking, or smoking in these spaces.

Personnel who handle or connect sewage transfer hoses will not handle potable water hoses without first washing and changing into clean clothing. No open flames, flashlights, or electrical apparatus will be in or near holding tanks until they have been certified gas-free. When the space is certified gas-free, personnel may enter using an approved OBA and wearing a safety harness and tending line if only one person is entering the space. If more than one person enters the tank, they must keep each other in sight at all times.

MEDICAL DEPARTMENT RESPONSIBILITIES

The presence of MSDs and the associated equipment and facilities aboard ship increase the risk of exposure to untreated wastewater, which in turn increases the potential for diseases associated with human waste. Medical Department representatives must become familiar with the MSDs on board their ship and knowledgeable in the proper personal hygiene practices and decontamination procedures concerning the operation and maintenance of MSD systems. The MDR's duties should include:

- Conducting visual inspections of MSD components as part of the routine habitability and sanitation inspection program or, more frequently, at the discretion of the commanding officer. The MDR's routine inspection responsibilities should be limited to spaces where there is an interface between the MSD components and food service, living and berthing, and medical spaces.

- Indoctrination of personnel associated with the operation, maintenance, and repair of MSD systems concerning the potential health hazards associated with human wastes, proper personal hygiene, and the correct procedures for cleaning and disinfecting contaminated spaces.

- Providing on-site advice, when requested, in the correct procedures for personal protection and disinfection of spaces in the event of major spills or leaks. The MDR must be present for cleanups and disinfection of food service, living, and medical spaces.

WASTE DISPOSAL IN THE FIELD

The disposal of sewage in the field is accomplished by various special adaptations such as cat holes (for individual one-time use), pit and straddle trenches, deep pit latrines, and urine soakage pits. Specific information on these and other waste disposal systems for field use are contained in NAVPERS 10819-B, *Combat and Field Medicine Practice,* and FM21-10, Field Hygiene and Sanitation.

COMMUNICABLE DISEASE CONTROL

CONTROL OF SEXUALLY TRANSMITTED DISEASE

The control of sexually transmitted disease (STD), formerly referred to as venereal disease (VD), is a command responsibility. The Medical Department is concerned with the medical aspects of STD and its control consistent with the policy outlined in SECNAVINST 6222.1 series.

Responsibilities

Staff Medical Officer. Staff medical officers at major fleet and shore commands will monitor and coordinate STD control efforts.

STD Control Officer. Officers and petty officers of the Navy Medical Department assigned the function of STD control officer will advise local commands on STD control; assist when requested in basic STD education programs; administer the STD interview and contact tracing program; cooperate with other military and civilian health authorities in the contact tracing program; collect data on occurrence; and maintain liaison with the local Armed Forces Disciplinary Control Board and the command or district medical officer.

Clinical Care Personnel. MDRs assigned the responsibility of diagnosing or treating STD, in addition to any of the duties listed above, will use current regimens and methods in diagnosing and treating STD; provide prophylaxis or epidemiological treatment when appropriate; cooperate with the STD control officer; assist in the STD education program; and ensure that patients who have contracted STD are provided with special education aimed at preventing future infections.

STD Control Program

Current efforts in the STD control program include education, prophylaxis, diagnosis, treatment, contact tracing, and evaluating these measures to determine their effectiveness.

The diagnosis and treatment of STD is discussed in NAVMED P-5052-11A, Treatment and Management of Venereal Disease, and NAVPERS 10669-B, *HM 3 & 2* RTM.

Education

Patient education is a primary tool in controlling the spread of STD. As you have heard many times, the best method of combating and controlling disease is to prevent it.

The General Military Training Program (OPNAVINST 1500.22 series) is designed to provide all hands with a basic knowledge concerning STD and its prevention. Persons at high risk of contracting STD, especially those who have had one of these diseases, require more intensive education. STD control officers and MDRs must develop local programs to meet this need.

In the past, educational efforts to control STD used the fear approach by illustrating gross malignancies and lesions of latent cases, while lightly passing over the early symptoms which, if recognized, encourage personnel to present themselves for early diagnosis and treatment. This type of educational approach, along with the policy of a disciplinary approach with resultant punitive measures, caused personnel to conceal their infection or to resort to self-treatment. The best approach to STD education is one that is straightforward, factual, and nonmoralistic, which at the same time does not condone promiscuity by implication. Emphasis should be placed on abstinence as the only sure method of prevention. However, prophylactics should be made available to prevent infections. It should be stressed that no punitive measures will be taken against people who contract one of these infections if they voluntarily report for treatment, regardless of the time lapse. Isolation or restriction is ordinarily not medically justified.

Contact Interviewing

Contact interviewing is a controlled conversation between the interviewer and an infected patient. Its purpose is to elicit information that will make it possible to find and bring to treatment everyone with whom the patient was sexually intimate during the critical period. This period is the time during which the infected patient could have acquired and transmitted the infection.

Contact interviews should be performed by qualified personnel who have attended a formal course in interviewing techniques under the auspices of a Federal medical service. Activities requiring qualified interviewers may contact area EPMUs for availability of such courses. At least one individual in the Medical Department of each command should be qualified to conduct contact tracing. Since at this time there is no requirement for personnel to attend a formal course before performing contact tracing and interviewing, it behooves all senior hospital corpsmen to be familiar with the basic techniques involved.

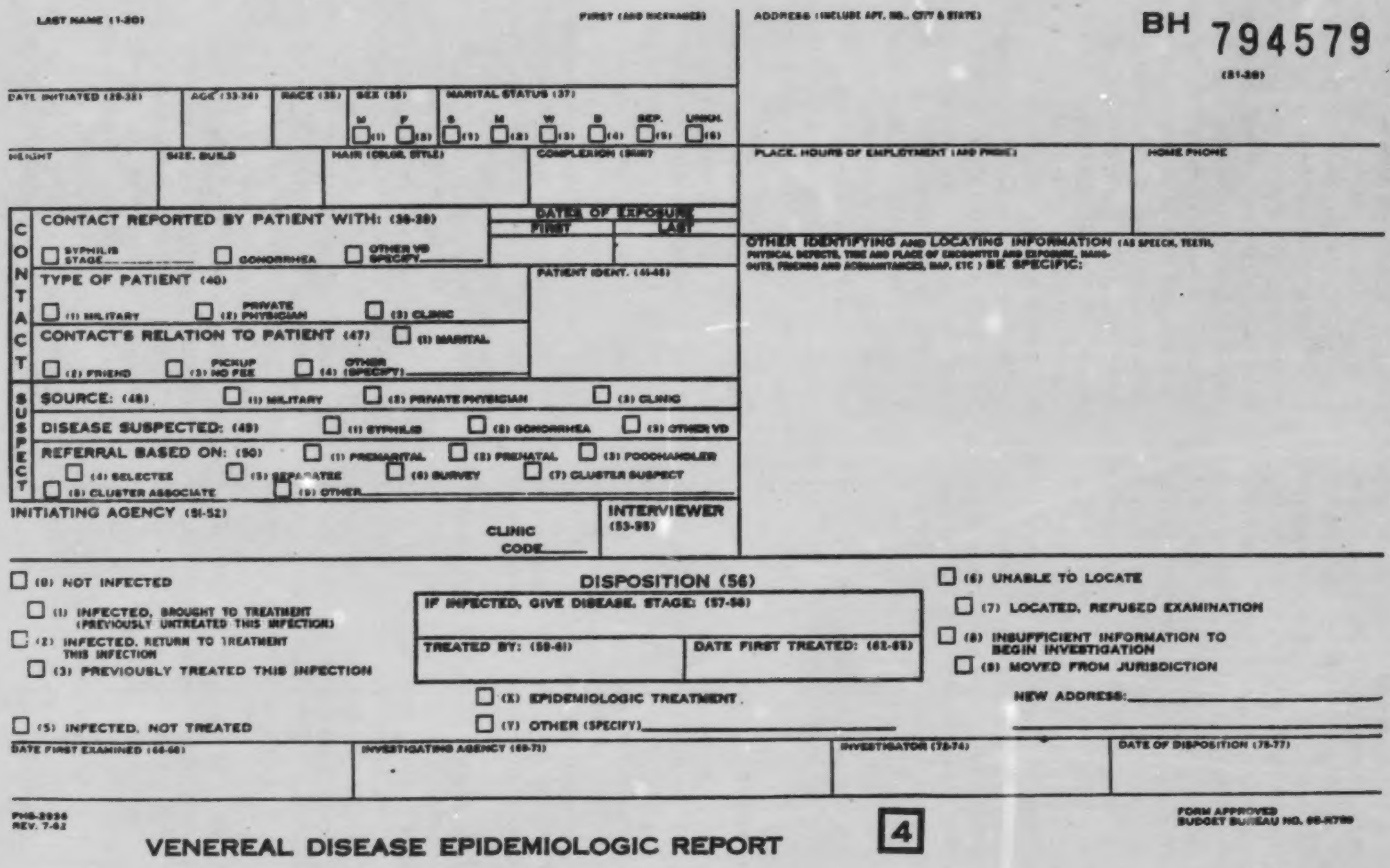
During the interview, three areas of information should be explored in detail. The first is concerned with general information about the patients's social environment; the second with getting a medical history of previous sexually transmitted diseases; and the third with a history of sexual behavior and the people involved. For epidemiological purposes the interviewer will be concerned with two periods of time: a critical period and an interviewing period. The critical period is always determined individually for each patient and is based on the duration of symptoms and the maximum incubation period for the particular stage of the disease. The interviewing period is arbitrarily established by the interviewer, making it long enough to overlap the critical period.

The MDR responsible for contact interviewing is the single most important individual in the total STD control program, since the epidemiological success or failure is in his or her hands. To be most effective, the MDR must maintain an open mind concerning the patient's sexual behavior. The interviewer's personal moral standards and convictions must never be expressed, implied, or conveyed in any manner to the patient. The goal of the interview is to obtain the names of all the patient's contacts within the critical period of infection. Any and all information obtained in the interview is privileged communication and must remain so.

There are no hard and fast rules for conducting an interview. Each interview must be tailored to the individual patient. What works in obtaining results with one patient may alienate the next patient and result in poor information. Full step-by-step procedures and methods for conducting interviews are contained in NAVMED P-5036, Interviewer's Aid for VD Contact Investigation. The interviewing techniques described in NAVMED P-5036 are by no means the only approach to the contact interview, but one that has proven successful for many interviewers. Common sense, sound judgment, and maturity are as important to the interviewer's success as are training and knowledge.

Since patients probably cannot remember all the epidemiological information they are asked to furnish on their sexual contacts during a 1-hour interview, they should be interviewed again later for additional information.

The contact interviewer is required to complete and distribute the STD contact reports. PHS-2936, Venereal Disease Epidemiologic



LAST NAME (1-20)
FIRST (AND NICKNAMES)
ADDRESS (INCLUDE APT. NO., CITY & STATE)

BH 794579
(21-28)

DATE INITIATED (29-32)
AGE (33-34)
RACE (35)
SEX (36): M ☐(1) F ☐(2)
MARITAL STATUS (37): S ☐(1) M ☐(2) W ☐(3) D ☐(4) SEP. ☐(5) UNKN. ☐(6)

HEIGHT
SIZE, BUILD
HAIR (COLOR, STYLE)
COMPLEXION (SKIN)
PLACE, HOURS OF EMPLOYMENT (AND PHONE)
HOME PHONE

OTHER IDENTIFYING AND LOCATING INFORMATION (AS SPEECH, TEETH, PHYSICAL DEFECTS, TIME AND PLACE OF ENCOUNTER AND EXPOSURE, HANG-OUTS, FRIENDS AND ACQUAINTANCES, MAP, ETC.) BE SPECIFIC:

CONTACT

CONTACT REPORTED BY PATIENT WITH: (38-39)
☐ SYPHILIS STAGE______ ☐ GONORRHEA ☐ OTHER VD SPECIFY______

DATES OF EXPOSURE: FIRST / LAST

TYPE OF PATIENT (40)
☐ (1) MILITARY ☐ (2) PRIVATE PHYSICIAN ☐ (3) CLINIC

PATIENT IDENT. (41-46)

CONTACT'S RELATION TO PATIENT (47) ☐ (1) MARITAL
☐ (2) FRIEND ☐ (3) PICKUP NO FEE ☐ (4) OTHER (SPECIFY)______

SUSPECT

SOURCE: (48) ☐ (1) MILITARY ☐ (2) PRIVATE PHYSICIAN ☐ (3) CLINIC

DISEASE SUSPECTED: (49) ☐ (1) SYPHILIS ☐ (2) GONORRHEA ☐ (3) OTHER VD

REFERRAL BASED ON: (50) ☐ (1) PREMARITAL ☐ (2) PRENATAL ☐ (3) FOODHANDLER
☐ (4) SELECTEE ☐ (5) SEPARATEE ☐ (6) SURVEY ☐ (7) CLUSTER SUSPECT
☐ (8) CLUSTER ASSOCIATE ☐ (9) OTHER______

INITIATING AGENCY (51-52)
CLINIC CODE______
INTERVIEWER (53-55)

DISPOSITION (56)

☐ (0) NOT INFECTED
☐ (1) INFECTED, BROUGHT TO TREATMENT (PREVIOUSLY UNTREATED THIS INFECTION)
☐ (2) INFECTED, RETURN TO TREATMENT THIS INFECTION
☐ (3) PREVIOUSLY TREATED THIS INFECTION
☐ (5) INFECTED, NOT TREATED

IF INFECTED, GIVE DISEASE, STAGE: (57-58)
TREATED BY: (59-61)
DATE FIRST TREATED: (62-65)

☐ (X) EPIDEMIOLOGIC TREATMENT.
☐ (Y) OTHER (SPECIFY)______

☐ (6) UNABLE TO LOCATE
☐ (7) LOCATED, REFUSED EXAMINATION
☐ (8) INSUFFICIENT INFORMATION TO BEGIN INVESTIGATION
☐ (9) MOVED FROM JURISDICTION
NEW ADDRESS:______

DATE FIRST EXAMINED (66-68)
INVESTIGATING AGENCY (69-71)
INVESTIGATOR (72-74)
DATE OF DISPOSITION (75-77)

PHS-2936
REV. 7-62

FORM APPROVED
BUDGET BUREAU NO. 68-R799

VENEREAL DISEASE EPIDEMIOLOGIC REPORT

4

159.25

Figure 5-4.—Venereal Disease Epidemiologic Report.

Report (see fig. 5-4) is the most commonly used form in STD contact investigation. It should be completed on every sexual contact obtained in the interview. It may also be used for cluster suspects named by the patient. These are persons, other than contacts in the critical period, for whom an examination is deemed necessary. This form must be completed properly so that there is no doubt in the mind of the investigator as to the disease involved or the followup necessary. Instructions for completing and distributing this form are located in NAVMED P-5036. The routing of the form may vary in different locations. Individual commands should check with State and local health authorities for routing procedures in their jurisdiction. Most States also request that a patient morbidity card be completed on all patients diagnosed as having STD.

Personnel involved in STD control programs should continually evaluate the effectiveness of the efforts made in local STD control programs so that more effective measures may be instituted, as required, and high risk areas and personnel requiring more intensive attention can be identified.

Typewritten and complete documentation of all STD diagnoses should be made of SF 600, Chronological Record of Medical Care. STD followups are also entered on the SF 600.

Contact Investigation

Contact investigation is defined as the locating and bringing to therapy persons known to have been exposed to an infected person. These persons are identified and located on the basis of information obtained from the interview.

Few contact investigations are carried out by military STD workers except on certain military installations and in occupied areas. Civilian contacts are usually the responsibility of the local public health department. However, you should be aware of the methods and techniques used, since a patient might be concerned with how the investigation is to be conducted. The best method of acquiring this information is to meet with the contact investigators of the local health department, who can outline the method of operation for that area.

TUBERCULOSIS CONTROL PROGRAM

While the incidence of tuberculosis (TB) is slowly declining in the United States, substantial numbers of cases still occur in the Navy and Marine Corps, and the potential for epidemics remains. The purpose of the TB Control Program is to prevent its spread by early detection and treatment of personnel with active disease. Personnel who develop a reactive skin test are at risk of developing clinical TB and must have periodic chest X-rays to detect active disease. With modern medical management most people who develop clinical TB may be expected to return to duty; but early detection is still essential to reduce the impact of the disease on patients, their associates, and the service.

The Navy and Marine Corps TB Control Program consists of case finding and patient disposition.

Case Finding

- Routine TB Screening Program. The purpose of this program is to detect as early as possible individuals who have been infected by tubercle bacilli or who have progressed and developed clinical TB.

  - The TB skin test (Mantoux method) is the basic method used for routine TB case finding and is used for individuals with previously recorded nonreactive or unrecorded skin tests.

  - A chest X-ray is used for routine TB case finding in individuals who have previously recorded reactive skin tests.

- Tuberculosis Contact Investigation Program. The purpose of this program is the early detection of TB in personnel who may have been exposed to an active TB case and who consequently may be at high risk of developing the disease.

Patient Disposition

Patients with reactive TB tests or abnormal clinical or laboratory findings are further investigated. Those suspected to have or diagnosed as having the disease receive care or treatment.

When to test, how to test, and what to do with reactive and nonreactive personnel; responsibility and procedures for local program management; and reporting requirements are discussed at length in BUMEDINST 6224.1 series. All Medical Department personnel concerned with the TB control program, especially MDRs aboard ship, must be thoroughly familiar with the contents of this instruction.

In general, all personnel will be tested at least annually and more often if circumstances dictate. Upon discovery of a case of TB in the command, a Disease Alert Report, MED-6220-3, will be prepared and submitted IAW MANMED. The patient's close contacts, as determined by a medical officer or MDR, will be located, screened, evaluated, and reported. When a present or former member of the command has suspected or confirmed TB, a contact investigation program must be started. Each person who has been a close contact of a known, active, infectious case of TB will be screened. A Tuberculosis Contact/Converter Follow-up Form, NAVMED 6224/1, will be started and placed in the health record of each individual affected. Each contact will be initially tested and subsequently reexamined at 3-, 6-, and 12-month intervals.

Report of Tuberculosis Contact Investigation, MED-6224-9, is submitted to the Chief, BUMED, with copies to the area NEPMU and DMC. This report is required upon initial study and again at 3-, 6-, and 12-month intervals.

The Annual Report of Tuberculin Retesting, MED-6224-8, is prepared by all activities having Medical Department personnel and submitted annually by 1 February. Medical Department personnel should maintain a tickler system to ensure compliance with TB control program requirements.

The current drug of choice for TB chemoprophylaxis is isoniazid (INH). Chemoprophylaxis is given to active duty personnel under 35 years of age who are reactors and who have never received such a course before, provided no contraindications exist. Decisions concerning chemoprophylaxis in persons aged 35 and over must be made on an individual basis. Generally, chemoprophylaxis is indicated for tuberculin reactors over 35 when the danger of contracting active TB is significant.

IMMUNIZATIONS

Requirements for routine and special immunizations must be strictly adhered to.

When administering immunizations, it is accepted practice to have a physician nearby. Therefore, routine immunizations are not normally administered at sea. The crews of ships in port will receive immunizations as close as possible to prescribed schedules. The crew of a ship incapable of deploying for prolonged periods, such as during overhaul or construction, is not required to receive immunizations required only of alert forces. However, foresight must be used to avoid last minute immunizations at the time of deployment or transfer. In some circumstances mass immunizations, such as prophylactic administration of gamma globulin, will become necessary. The most common method of mass immunization is through the use of "shot lines." You will undoubtedly remember this practice from boot camp. Foresight and preplanning should preclude the routine use of mass administration techniques in routine immunizations. However, in special situations, such as administration of influenza virus vaccine, the use of shot lines is a practical solution to the problem. When immunizations are administered on a mass scale, the tendency to shortcut recommended procedures increases the likelihood of contamination and improper administration. Conscientiousness, attention to detail, and observance of all recommended precautions and techniques listed in NAVMED P-5052-15 and BUMEDINST 6230.1 series must be practiced to ensure safe and effective immunizations.

QUARANTINE REGULATIONS

Quarantine procedures in the Navy are designed to prevent dissemination of human, animal, or plant diseases from place to place. Basic regulations and detailed instructions are contained in SECNAVINST 6210.2 series. Additional information in MANMED 22 and other published instructions should be consulted.

It is the responsibility of Medical Department Personnel ashore or afloat to be well informed concerning current naval quarantine regulations and instructions and to give advice and make recommendations in matters of quarantine to the commanding officer. In the United States and its Territories and possessions, quarantine authority and responsibility is assigned by Federal statute to the USPHS for human diseases, the USDA for plant and animal diseases, and the Department of the Interior for wildlife diseases. Local, State, city, and county authority is also recognized by the Navy and must be complied with.

By international agreement, four diseases are quarantinable: cholera, plague, smallpox, and yellow fever.

While emphasis is placed on measures to prevent the spread of quarantinable diseases, the Medical Department is responsible for recommending measures to prevent the spread of all communicable diseases both within and among the naval establishments and civilian communities.

By international convention a Certificate of Deratization, or a Deratization Exemption Certificate is required of vessels entering most foreign ports to avoid detention for fumigation. This certificate must be issued by the USPHS and is valid for 6 months. MDRs of ships proceeding to foreign ports must apply for a certificate before departure. These certificates are obtained by requesting that a rodent inspection be made by a USPHS representative. If rodents are present on inspection, deratization measures are required. After deratization, a Certificate of Deratization will be issued. If no rodents are found, a Certificate of Deratization Exemption will be issued.

Ships proceeding to foreign ports will meet the quarantine requirements issued by proper authority of such port. Upon arrival at a foreign port, local requirements pertaining to quarantine regulations should be checked.

For ships arriving at ports under the control of the United States, routine submission of a Maritime Public Health Declaration as described in SECNAVINST 6210.2 series will be limited to:

- Ships that in the 15 days before arriving in a U.S. port have had any passengers or crew members with a temperature of 100°F or higher, which persisted for 2 or more days, or which was accompanied by a rash, jaundice, glandular swelling, or diarrhea severe enough to interrupt normal work or cause death.

- Vessels that have been in a smallpox-infected country within 15 days before arriving in the U.S.

- Vessels that have been in a plague-infected country within 60 days before arriving in the U.S.

Vessels arriving in ports are no longer required to complete a quarantine declaration unless boarded under the conditions listed above. The boarding inspector will furnish the declaration.

International Health and USPHS Quarantine Regulations no longer require ships to use rat guards except when the ship is berthed in a port where plague is endemic or where large rat populations are present. In some CONUS ports, rat guards are required for all naval vessels.

Interstate movement within the United States of etiologic agents and persons with communicable diseases are governed by Federal regulations. These regulations are designed to prevent the spread of disease from one State to another and are enforced by the USPHS and State health departments. Commanding officers should maintain liaison with the USPHS and regional offices.

SAFETY AND INDUSTRIAL HEALTH

No preventive medicine program is complete without consideration of the health hazards presented by improper safety practices and hazardous working conditions.

METALS AND OTHER MATERIALS

Under certain conditions many materials vaporize and give off very toxic fumes. Lead vaporizes when it is heated or melted. It will therefore be a hazard only if it is being welded or cut, or if metal is being cut that has been painted with lead-containing paint. Using a proper respirator will generally prevent inhalation of metal fumes.

Selenium is found in many rectifiers that under certain conditions may break down and give off a brown, choking vapor. A proper filter respirator will protect against inhalation. Cadmium-plated objects must not be heated under any circumstances.

Beryllium absorbed into the body in any form leads to a chronic, progressive, fatal disease. Use extreme caution when working with metal containing beryllium. For details see BUMEDINST 6260.13 series.

Metal fume fever is a condition caused by inhalation of fumes from zinc, iron, magnesium, or lead; or metals containing any of these base metals. Remember, cutting or welding these metals, painting with lead base paints, or soldering with material containing hazardous metals creates health hazards.

When working with hazardous metals, you must refrain from smoking as this increases the likelihood of inhalation of the resulting fumes.

ASBESTOS CONTROL

Asbestos is a general term used to describe several fibrous mineral silicates used for asbestos cement products, fireproofing, insulation, and asbestos cloth.

Inhaling asbestos fibers can produce severe lung damage in the form of fibrosis. Asbestos is also a factor in the development of cancer (mesothelioma) of the membranes lining the chest and abdomen.

Although asbestos-free substitute materials are being developed, much asbestos material continues to be used in the Navy, particularly in boiler and pipe insulation, which will involve "ripout" and potential personnel exposure for a number of years to come.

OPNAVINST 6260.1 series and BUMEDINST 6260.14 series provide guidance concerning occupational health standards, control, and medical surveillance requirements for asbestos exposure.

Local exhaust ventilation control measures and dust collection systems must be installed and maintained to control the concentration of airborne asbestos fibers. See NAVSHIPTECH Manual for control procedures. Asbestos must be handled or otherwise worked in a wet state to prevent it from becoming airborne. All asbestos waste, including bags, containers, equipment, and contaminated clothing will be collected, wetted down, and disposed of in sealed bags or containers. Personnel working with asbestos will be provided with respirators, coveralls, head coverings, gloves, and foot coverings.

HALOGENATED HYDROCARBONS

Halogenated hydrocarbons are compounds of carbon and hydrogen, in which one or more of the hydrogen atoms have been replaced by the halogens chlorine, bromine, fluoride, or iodine. They are normally used in gaseous or liquid form as solvents, refrigerants, fumigants, insecticides, paint removers, dry cleaning fluids, and repellents.

All halogenated hydrocarbons are hazardous to health in some degree if inhaled, swallowed, or absorbed through the skin.

- Inhalation—Acute inhalation of vapor or gas may produce dizziness, headache, and central nervous system depression leading to unconsciousness and death. Chronic exposure to small amounts may cause serious damage to the liver and kidneys.

- Swallowing—Gastrointestinal irritation and damage to the liver and kidneys.

- Exposure of skin and eyes—Halogenated hydrocarbons cause severe conjunctivitis if eyes are exposed to gas, vapor or liquid. Many of these materials dry the skin and are absorbed, causing systemic effects.

When exposed to high temperatures or ultraviolet radiation (such as that generated by arc-welding), halogenated hydrocarbons decompose and form extremely toxic materials such as phosgene gas and hydrogen chloride. In case of fires in areas containing these materials, all personnel entering these spaces must be provided with a self-contained breathing apparatus. All halogenated hydrocarbons must be labeled properly and special care must be taken to avoid

130

confusing materials because of similarly spelled names. Whenever halogenated hydrocarbons are used, adequate ventilation must be provided. All personnel working with halogenated hydrocarbons in confined or enclosed spaces must use breathing equipment and wear protective clothing. In addition, they must be periodically tested as prescribed in BUMEDINST 6260.12 series.

OTTO FUEL II

Otto Fuel II is a liquid propellant used in certain types of torpedoes. It can be harmful or fatal if swallowed, inhaled, or absorbed through the skin. The first symptom is nasal irritation followed by headache.

Personnel exposed to Otto Fuel II should have predeployment and yearly physical examinations. Personnel with a history of arrhythmia, angina, hypertension, or hypotension must not be assigned to work with this fuel. Ventilation systems for preparation and maintenance operations involving Otto Fuel II must be installed to ensure that excess exposure to Otto Fuel II does not occur. Until such ventilation systems are provided, personnel working in and around areas where Otto Fuel II is being used must be provided with a positive pressure breathing apparatus. A daily change of freshly laundered coveralls is required. A neoprene apron must be worn over the coveralls and neoprene or polyethylene gloves provided. The gloves must be discarded at the end of each new operation. See BUMEDINST 6260 series for additional information. The hazards discussed herein are not all-inclusive. Each ship or station is an individual command; thus, the health hazards and hazardous materials within each command will vary. You, the MDR, must seek out and identify the hazards within your command.

ACCIDENT PREVENTION PROGRAM

Under the direction of the commanding officer, the medical officer or MDR assumes responsibility together with the safety officer for establishing a comprehensive safety and accident prevention program. This includes inspecting machinery, tools, equipment, and work methods for accident hazards and making recommendations to correct discrepancies and ensure compliance with recommeded policies. OPNAVINST 5101.2 and 5100.18 series outline responsibilities and procedures for the Shipboard Accident Prevention Program.

HEARING CONSERVATION PROGRAM

The health problems created by intense noise ashore and afloat continue to increase. OPNAVINST 6260.2 series provides for the establishment of uniform and effective hearing conservation programs throughout the Navy. The basic objective of these programs is to prevent hearing loss in personnel exposed to hazardous noise levels.

Commanding officers are responsible for implementing the basic elements of the program. MDRs are responsible for ensuring that the basic elements of the program are accomplished IAW OPNAVINST 6260.2 series.

CHAPTER 6

MEDICAL ASPECTS OF CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL DEFENSE

CHEMICAL DEFENSE

To appreciate the importance of defense against chemical agents, one only has to study the disastrous experience of unprepared and improperly indoctrinated troops in World War I. The importance of planning and training for defense against chemical agents cannot be underestimated.

Chemical agents may be dispersed by modern weapons for strategic as well as tactical purposes; the areas of their employment are limited by the range of the weapons or aircraft used by the combatant force. The chances of surviving a chemical attack are increased as knowledge of the nature of the agents and of the use of correct protective measures is increased.

A naval unit afloat finds itself in a unique situation insofar as defending against toxic chemical agents is concerned. Because agents can be released as clouds of vapor or aerosol, they can envelop the exterior of a vessel and may penetrate within the hull due to the extensive use of artificial ventilation aboard ship. Therefore, extensive contamination may result from such an attack. As the ship, in most cases, cannot be abandoned, it must be decontaminated while the personnel manning it continue to eat, sleep, live, and fight on board.

The medical officer or the hospital corpsman on independent duty must organize the Medical Department to meet the medical needs of defense against chemical agents well in advance of actual need. All hands must be indoctrinated in the use of protective equipment and self-aid procedures. Close liaison and planning must be maintained with damage control personnel responsible for area decontamination, and all medical personnel must be informed of the approved methods currently available for treatment of casualties resulting from the use of chemical agents.

Self-Protection and Treatment

In a chemical attack, the first priority is to ensure your own survival so that you may then treat casualties. There are several items available to help you survive a chemical attack, and you should know how to use them. They include a protective mask, which should be put on at the first indication of a chemical attack. It will filter out all known chemical agents from the air and allow you to work in a chemically contaminated area. In addition, there is the M258 personal decontamination kit, which is to be used to chemically neutralize any toxic chemical agent you may have on your clothing or skin. Finally, there is the automatic nerve agent antidote injector for your own use if you become a nerve agent casualty. Familiarize yourself with your equipment so you will know how it works when you need it.

Decontamination

Procedure

The guiding principle in personnel decontamination is to avoid spreading contamination to clean areas and to manage casualties without aggravating other injuries.

It will frequently be necessary to decide whether to handle the surgical condition or the chemical hazard first. If the situation and the condition of the casualty permit, decontamination should be carried out first, for the longer the chemical remains on the body the more severe will be the danger of spreading the chemical to other personnel and equipment.

In general, the following order of priority of first aid for contaminated casualties is recommended:

- If contaminated with a liquid nerve gas (anticholinesterase):
  - Control of massive hemorrhage
  - Decontamination of the face and eyes and adjustment of the mask if in a contaminated atmosphere
  - Removal of contaminated clothing and decontamination of body surfaces after entering an uncontaminated area
  - First aid for shock and wounds
- If contaminated with a liquid vesicant (blister gas):
  - Control of massive hemorrhage
  - First aid for life-threatening shock and wounds
  - Decontamination of exposed skin and eyes
  - Removal of contaminated clothing and decontamination of body surfaces
  - Adjustment of patient's mask, if a mask seems necessary
  - First aid for less severe shock and wounds

The basic plan for sorting and handling casualties is indicated in figure 6-1. This plan should be modified to fit specific needs. In general, the decontamination station, or "dirty" area, receives casualties contaminated with a chemical agent. The arrangement of this area will vary with the site of the medical unit and the facilities available for decontamination.

All ships of the force will have at least two decontamination stations, insofar as the hull design permits. The "dirty" areas should be topside or in some well-ventilated space. Personnel manning these areas should be provided with protective equipment.

In the "dirty" area casualties will be decontaminated, undressed, showered, and passed along to clean areas. Both areas should be clearly marked "clean" or "contaminated." Decontamination kits, protective ointment, and an abundant supply of soap and water must be provided. In addition, standard first-aid items should be on hand. It will be extremely helpful if small trestles, boxes, or similar supports are improvised so that stretchers may be placed on them and thus be raised off the deck.

Personnel handling contaminated cases must avoid spreading contamination to other personnel and to spaces not set aside as areas of reception of contaminated cases. Contaminated personnel, clothing, or equipment must be kept out of uncontaminated areas. The subsequent decontamination of such spaces is quite difficult and must be avoided. Contaminated clothing and gear must be placed in designated dump areas and, insofar as practical, must be kept in metal cans with tightly fitting covers.

Supplies

The medical officer or Medical Department representative is responsible for maintaining

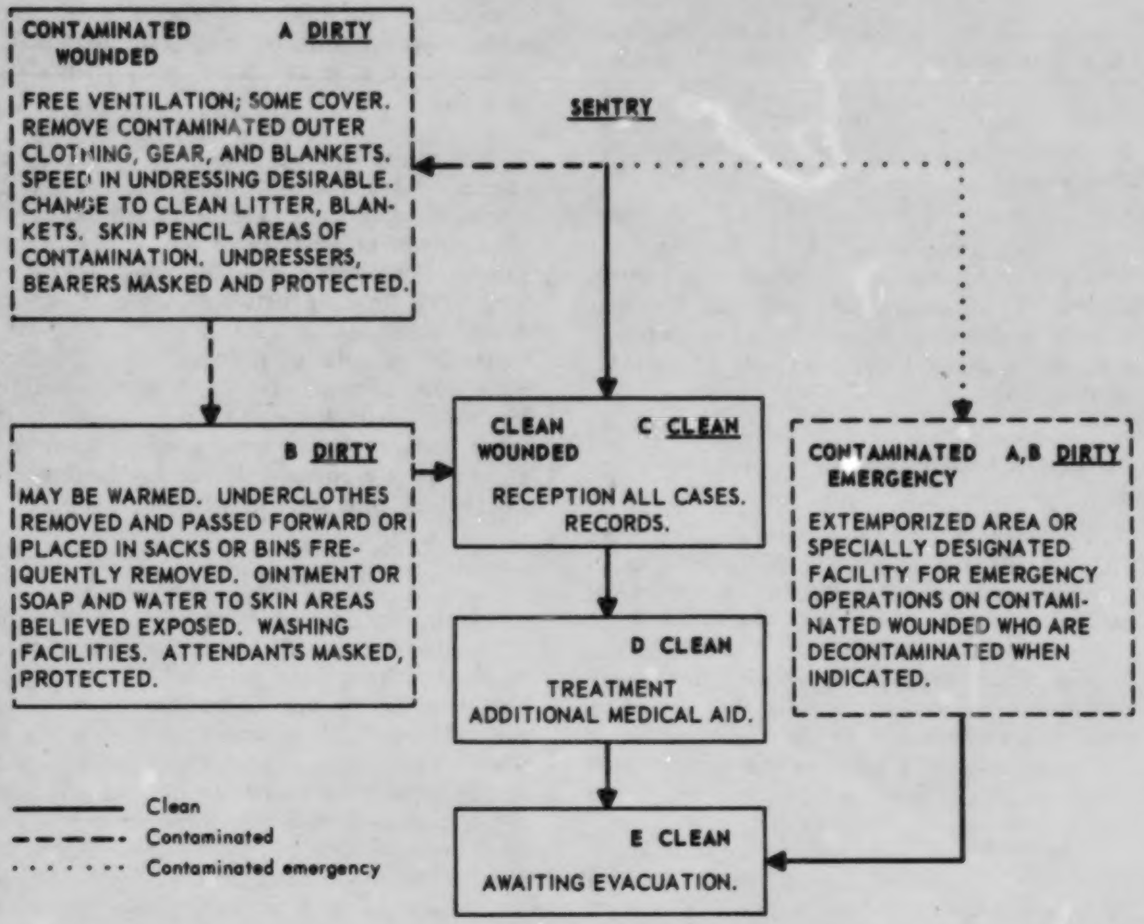

CONTAMINATED WOUNDED
A DIRTY
FREE VENTILATION; SOME COVER. REMOVE CONTAMINATED OUTER CLOTHING, GEAR, AND BLANKETS. SPEED IN UNDRESSING DESIRABLE. CHANGE TO CLEAN LITTER, BLANKETS. SKIN PENCIL AREAS OF CONTAMINATION. UNDRESSERS, BEARERS MASKED AND PROTECTED.
SENTRY
B DIRTY
MAY BE WARMED. UNDERCLOTHES REMOVED AND PASSED FORWARD OR PLACED IN SACKS OR BINS FREQUENTLY REMOVED. OINTMENT OR SOAP AND WATER TO SKIN AREAS BELIEVED EXPOSED. WASHING FACILITIES. ATTENDANTS MASKED, PROTECTED.
CLEAN WOUNDED
C CLEAN
RECEPTION ALL CASES. RECORDS.
D CLEAN
TREATMENT ADDITIONAL MEDICAL AID.
E CLEAN
AWAITING EVACUATION.
CONTAMINATED EMERGENCY
A,B DIRTY
EXTEMPORIZED AREA OR SPECIALLY DESIGNATED FACILITY FOR EMERGENCY OPERATIONS ON CONTAMINATED WOUNDED WHO ARE DECONTAMINATED WHEN INDICATED.
Clean
Contaminated
Contaminated emergency

Figure 6-1.—Basic Plan for Sorting and Handling Casualties.

adequate suppllies for the decontamination and treatment of chemical, biological, and radiological casualties.

Medical decontamination supplies are supplied to ships of the force on a personnel strength basis as listed in current AMALs and BUMEDINST 6710.50.

The following materials will be provided and stowed in a suitable mounted cabinet or chest at the primary and secondary decontamination stations:

STOCK NUMBER	ITEM DESCRIPTION
L6505-141-1900	Hexachlorophene soap, bar, 4 oz
L3590-00-170-8462	Clipper, hair, surgical
L6515-00-309-6500	Bath, eye, glass
L6515-00-363-8840	Scissors, bandage, 7 1/4"
L6515-00-379-6820	Syringe, bulb, 4 oz

STOCK NUMBER	ITEM DESCRIPTION
L6640-00-165-5778	Bottle, urine specimen
L6640-00-729-6484	Tube, biological sampling, 100s
7920-00-772-3935	Brush, scrub
7920-00-823-6931	Towels, paper, 30s
Open purchase	Nail clipper

The cabinets will be kept locked, and the keys will be in custody of the damage control assistant during emergency conditions. Cabinets and chests will be stenciled with a red cross and marked "DECONTAMINATION MEDICAL SUPPLIES."

BIOLOGICAL DEFENSE

Epidemics arising from natural causes have plagued military forces for centuries and in many instances have determined the outcome of campaigns. In the past, recognition of this drain on personnel undoubtedly has led to attempts to produce illness in epidemic proportions through pollution of water and food supplies as well as through other means, but the dissemination of disease-producing organisms has never been employed on any significant scale as a weapon of war.

Since World War II, due to the general advancement of knowledge in the various fields of biological sciences and as a result of known research in many countries on the use of microorganisms as a weapon of war, biological warfare has become a very real possibility.

In the hands of the unscrupulous enemy, antianimal and antiplant agents could be powerful instruments of war, reducing or destroying a nation's food supply. This chapter, however, is concerned only with agents that would be effective against populations, and although their effectiveness has never been established by actual use in war, they are considered to have grave military capabilities.

Biological warfare has certain aspects in common with chemical warfare in that biological agents may be dispersed in the air and may travel downwind in the same manner as a gas cloud. These agents may be inhaled unless a protective mask is worn and may cause disability or death. They are capable of contaminating clothing, equipment, food, and water supplies. Some types of agents may persist in the target area for considerable periods of time.

Biological agents, unlike most war gases, cannot be detected by the physical senses or by chemical detectors, and their presence or identity can be determined only by laboratory examination of air samples or contaminated objects. The time lag between exposure and the onset of disease symptoms will usually be a matter of days, rather than hours, as is the case with most chemical agents. All persons will not be similarly affected even though exposed to the same dosage of biological agents. Some may escape disease entirely, some may have a very mild attack, and some may become seriously ill.

Individual Protection

As in the case of exposure to most communicable diseases, the natural resistance of the body and the maintenance of the body in the best possible physical condition constitute important lines of defense against biological agents. However, immunity and states of good health cannot be expected to triumph over massive onslaughts of biological agents that may have been tailored to create varying degrees of incapacitation including death. To reduce the effectiveness of such attacks, protective equipment has been provided and defensive measures have been delineated to protect the individual. In general, these measures closely parallel those provided for defense against chemical attack.

Since the inhalation of airborne organisms is considered to be the greatest potential hazard in biological warfare, the protective mask is an important component of defensive equipment. A mask that is in good condition and has been properly fitted will greatly reduce the possibility of inhaling infectious material in the air. Since the individual cannot detect the presence of biological agents, the use of the mask and other protective equipment will depend upon early warning.

To produce disease, biological agents must gain entrance into the body. A concentration of biological agents on the skin might, in time, be transferred to a portal of entry. Any type of clothing will provide some protection by reducing the quantity of agents coming in contact with the skin. The degree of protection afforded is dependent upon how well the fabric stops penetration and the number of layers of clothing being worn. Since this protective effect is due to the mechanical filtering or screening action of the cloth, it is important that shirt and jacket collars be fastened, sleeves rolled down and cuffs buttoned, trouser cuffs stuffed inside tops of boots or socks, and all other garment openings tied or otherwise secured to minimize the entry of airborne organisms and to reduce the risk of bodily contact with biological agents that may be present on the surface of the ground or in the air.

Military headgear helps safeguard the hair from heavy contamination, and ordinary gloves or mittens provide protection for the hands. The impregnated type of clothing issued for protection against chemical agents provides a higher degree of protection than the ordinary uniform, and whenever it is available it should be used.

Upon notification of an attack with biological agents, or before entering an area known to be contaminated by them, the individual will:

- Put on protective mask and check it for correct fit.
- Button clothing. Tie clothing at wrists and ankles with string or extra shoelaces. Put on special protective clothing, if available.
- Put on gloves, if available.
- While in the contaminated area, maintain the provisions outlined above.
- Upon leaving the area, proceed with decontamination measures to the extent the situation permits.

Group Protection

In biological as well as in chemical and radiological warfare, a tightly constructed shelter offers great protection. The shelter must be pressurized to prevent entrance of the microorganisms, which is accomplished by introducing filtered air into the shelter. If the shelter is reasonably tight, this incoming air will cause any flow of air to be outward. Any building, shelter, or field fortification without this feature provides only limited protection from aerosols. Eventually microorganisms will penetrate through cracks and will constitute a respiratory hazard unless the protective mask is worn. Again, utilization of shelters will depend upon early warning.

Protection of Food and Water

Food and water supplies are especially susceptible to deliberate contamination. Civilian supplies all too frequently do not receive careful supervision and protection and must always be suspected of accidental or deliberate contamination. It should also be emphasized that water is not necessarily pure just because it comes from a faucet. In some countries pure water is the exception rather than the rule. The safest rule is to consume only foods and drinks received from military sources. Procedures for protection of the water supply and routines for inspection and decontamination are well defined in the military and, if diligently observed, will protect from deliberate contamination.

Water

Chlorination is the almost universal method of purifying water, and it destroys most of the biological agents. Boiling may be required to ensure proper decontamination in exceptional cases.

The military establishes water points in the field whenever possible. The equipment location at these points provides for filtration as well as cholorination and, when properly operated, is effective in removing organisms that produce disease. Some biological agents cannot be destroyed by normal water purification techniques. When biological agents are known to have been used, all drinking water must be boiled. In preparing water for large numbers, the boiling procedure should be supervised. Water boiling may, of necessity, become an individual responsibility and may be so directed.

For small groups of people, the Lyster bag is provided as a suitable container for the storage of water that has already been treated for use in the purification process. Water that has not been made potable previously is purified in the Lyster bag by means of chemicals. Water purification procedures are discussed in detail in chapter 11 of the *HM 3 & 2* RTM.

Food

In the event of a known or suspected biological attack, all exposed or unpackaged foods not in critical supply should be destroyed. In most instances, food can be rendered safe for consumption by application of moist-heat cooking procedures. In some instances, deep fat cooking is adequate. Some foods, however, cannot be sterilized because the treatment would render them unacceptable for consumption.

Decontamination

The extent to which personal decontamination can be carried out following actual or suspected exposure to biological agents will depend upon the existing tactical situation and the facilities available. If the situation permits, contaminated clothing should be carefully removed and the body washed thoroughly with soap and water before donning fresh clothing. Specific attention should be given to decontamination and the treatment of skin lesions.

Personnel not physically able to handle their own decontamination become the responsibility of medical personnel. Since illness resulting from exposure to biological warfare may be delayed because of the incubation period, decontamination may occur before the individual becomes ill. Decontamination of the wounded, however, will not have been carried out and is the responsibility of Medical Department personnel. In the management of the wounded, a problem of priority may exist. When the situation and the condition of the casualty permit, decontamination should come first. However, massive hemorrhage, asphyxia, or other life-endangering conditions naturally receive priority.

In general, all candidates for decontamination should first have all exposed areas thoroughly washed with soap and large amounts of water, the mask adjusted, and all contaminated clothing removed. The casualty may then be moved to a clean area where the wounds can be treated.

Decontamination procedures are the same as those used for casualties of chemical warfare.

RADIOLOGICAL DEFENSE

Self-Protection

Teams entering contaminated areas to remove casualties and those working in decontamination stations need have no fear of alpha and beta particles penetrating the skin if they take ordinary precautions to keep the skin adequately covered. The main concern is to prevent radioactive contamination of the body via inhalation or ingestion. This can be accomplished by wearing an appropriate face mask. If one is not available, the following improvisations are suggested for some protection:

- Eight layers of thin cotton; for example, a man's folded handkerchief
- Three surgical masks
- A turkish towel
- Three layers of toilet tissue (CAUTION: The tissue absorbs moisture from the breath and will tear easily.)

Under most conditions foul weather gear of standard stock issue will protect ordinary clothing and skin from direct contact with radioactive contamination. A complete outfit includes the parka, trousers, rubber boots, and gloves and should be worn (together with the mask) for rescue work after contamination zones have been established. Those who have only ordinary work clothing must consider themselves inadequately protected.

Radioactive decay progresses rapidly in the early hours after a nuclear blast, and the hazards to rescue workers can be reduced considerably if operations can be delayed until natural decay has reduced the level of radioactivity. If teams trained in the use of survey instruments are available, guesswork can be eliminated since they will determine the intensity of radiation with their instruments and mark perimeters of danger zones.

Decontamination Stations

In a large-scale nuclear catastrophe there may be innumerable casualties suffering not only from mechanical injuries and thermal burns, but from radiation injuries and psychological reactions as well. One of the first problems will be to organize an efficient sorting system. The medical facility should consist of a personnel monitoring station, a clean and a contaminated emergency treatment station, a decontamination station, a sorting station, and various treatment stations. An ideal medical facility design is shown in figure 6-2. It should be set up so that personnel must pass through a monitoring station prior to sorting for medical care. If there is a need for decontamination, the casualty should be routed through the decontamination station on the way to the sorting station. If possible, the physical layout should be arranged so that no casualty can bypass the monitoring station and go directly to a treatment station. Also, casualties who are contaminated should be unable to enter clean areas without first passing through a decontamination station.

Patients brought in by the rescue teams or arriving on their own should first proceed through the monitoring station to determine whether or not they are contaminated with radioactive material. No medical treatment should be instituted in the monitoring station.

Generally speaking, only personnel who have had training and experience as members of

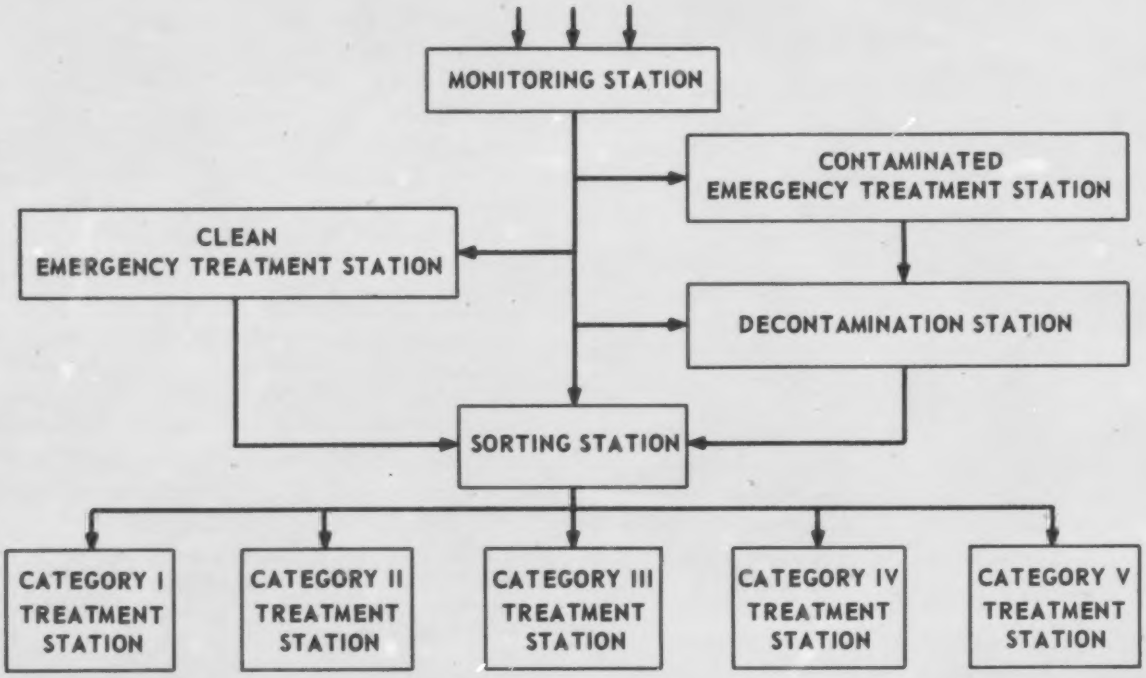

MONITORING STATION
CONTAMINATED EMERGENCY TREATMENT STATION
CLEAN EMERGENCY TREATMENT STATION
DECONTAMINATION STATION
SORTING STATION
CATEGORY I TREATMENT STATION
CATEGORY II TREATMENT STATION
CATEGORY III TREATMENT STATION
CATEGORY IV TREATMENT STATION
CATEGORY V TREATMENT STATION

Figure 6-2.—Patient Flow Pattern and Medical Treatment Facility.

Radiological Safety and Radiological Decontamination teams or as members of Damage Control parties should be assigned to the monitoring station. However, those operating the monitoring station should have a basic knowledge of and experience with radiac instruments. In this way, individuals can be used in either capacity should the need arise.

After the patients are monitored, they are directed or taken down one of four avenues, depending upon their physical conditions. Those requiring immediate lifesaving measures should be assumed to be contaminated and routed directly through the monitoring station to the contaminated emergency treatment station. Definitive monitoring for these individuals may be performed at the decontamination station. Both treatment stations are set up much the same and should have only those facilities necessary for immediate lifesaving forms of treatment. Personnel working in these stations should be better versed in emergency first-aid care than those used for monitoring and for rescue teams, and they need not be trained in radiation monitoring.

After emergency lifesaving procedures have been attended to, casualties from the clean emergency treatment station should be taken directly to the sorting station, and those from the contaminated treatment station should be taken to the decontamination station.

Casualties not requiring immediate emergency treatment should be taken or sent from the monitoring station directly to the sorting station or to the decontamination station, whichever is appropriate. The decontamination station should be set up to to take, hold, and dispose of all contaminated clothing and to supply clean replacement clothing after the casualty has been decontaminated. It will also require monitoring equipment, showering and washing facilities, and some capability for surgical (e.g., wound) decontamination when necessary.

Of the personnel available to the treatment facility, several of those most experienced and knowledgeable in radiological safety and radiation protection should be assigned supervisory jobs in the decontamination station. Also, it is highly desirable to have some personnel with operating room experience to decontaminate patients with traumatic injuries. It is not necessary for the other personnel working in the decontamination station to have any appreciable training or experience other than that given when the medical facility is put into operation.

Decontamination

Early removal of radioactive "dirt" will reduce radiation burns, radiation dosage, and the chances of inhaling or ingesting radioactive material. There are two rules to be remembered in the removal of radioactive contamination:

1. Removal of radioactive dirt is accomplished with soap and water, or failing this combination, creams or other skin preparations listed below.
2. Contamination is easily spread, so "spot" cleaning must be attended to before general decontamination procedures are started.

Cotton swabs or gauze may be used to decontaminate moist areas, gummed tapes to decontaminate dry areas. If after cleansing decontamination is inadequate, the process should be repeated three to five times; then, if contamination persists, one of the following preparations should be tried:

- A mixture of 50% detergent and 50% cornmeal with enough water added to make a paste. This should be used with additional water as necessary and the radioactive area scrubbed (preferably with a soft bristle surgical brush) for 5 minutes, then rinsed.

- A mixture of 30% detergent, 60% sodium hexametaphosphate, 5% carboxymethyl cellulose, and 5% water. This should be used with additional water, the area scrubbed for 1 minute, then rinsed.

- A cream made of 8% carboxymethyl cellulose, 3% detergent, 1% ethylenediaminetetraacetic acid (Versene), and 88% water. This cream should be rubbed into the contaminated area vigorously for 1 minute, then wiped clean.

- Abrasive soap used with water in a scrubbing action.

- Mechanics' waterless hand cleansing cream, which should be rubbed into the area for 1 minute, then wiped or rinsed off.

After the hot spots have been removed, the second step is to shower with soap and water. Scrub the entire body, including the hair and nails. After the shower, monitor again; if any contamination remains, again spot clean and shower. If the hair is contaminated, shampoo it several times.

If it becomes apparent that shampooing has not removed the radioactive material, clip the hair close to the scalp as necessary to remove the radioactive material.

If areas become tender from excessive washing, it may be necessary to restore some of the skin oils. To do this, add a small amount of cornmeal to lanolin or ordinary hand or face cream, rub this mixture into the skin for 5 minutes, allow it to remain on the skin for another 5 minutes, then remove it. This will soothe the skin and prepare it for futher decontamination if additional steps are necessary. Decontamination should be continued until the radioactivity has been reduced to the "safe" level set by the responsible Medical Department representative, or until it is decided that surgical removal of the involved area is necessary in which case steps should be taken to bring the casualty to the care of a surgeon.

The steps outlined above require large amounts of water. Facilities available may have only a limited supply of "clean" water. The following decontaminants attempt to take advantage of the chemical properties of the contaminant:

- Apply dilute (1% solution) ammonium citrate or dilute (1% solution) citric acid to the "hot" areas and rub for at least 5 minutes; then rinse the chemical off with plain water and dry the area.

- Add 1 gram of a 1-to-1 mixture by weight of tartaric and citric acids to a basin of water and soak the hot area in this for several minutes. This is especially recommended for contaminated hands and feet.

Protect any uncontaminated cut, scratch, or wound with an impermeable tape or other suitable material while decontaminating the rest of the body. If a wound is already contaminated, the simplest and least drastic decontamination method available should be tried first, always by trained medical personnel. First the wound should be carefully bathed or flushed with sterile water, and a reasonable amount of bleeding should be encouraged.

Following decontamination, standard triage procedures, described in chapter 4 of the *HM 3 & 2* RTM, are used.

Additional information pertaining to the initial management of irradiated or radioactivity contaminated individuals may be obtained from the current BUMEDINST 6470.10.

Contaminated Material and Supplies

Radiological material may be removed but not destroyed. Water then becomes a special problem. Water coming from an underground source usually is free from radioactive materials and is therefore usable, but water coming from a reservoir that has to depend upon a surface watershed for its source will not be usable. Fortunately, regular water-treatment processes that include coagulation, sedimentation, and filtration will remove most fallout material, and if the reservoir water can be properly treated, it will be usable again. But for safety's sake, never drink untested water. Distillation frees water of radioactive material providing emergency drinking water.

Supplies and food can be protected from residual radiation by storage in dustproof containers. Although the outside of the containers may become contaminated, most of this radioactive material may be removed by washing. The container can then be opened and the contents removed and used without fear of causing significant contamination.

The outer wrappings on medical supplies and the peelings on fruit and vegetables also afford protection to their contents. After carefully removing the outer coverings and checking the contents, it may be found that these materials will be safe to use.

Contaminated clothing should be handled with care. It should never be casually placed on furniture, hung on walls, or dropped on floors. Clothing should be stored in garbage cans or disposable containers. If these are not available, it should be placed on pieces of paper large enough to be rolled and secured. Grossly contaminated clothing should be properly disposed of by an authorized method, such as burial at sea or in deep pits or trenches, whichever is appropriate.

If clothing is in short supply, lightly contaminated clothing may be salvaged by special laundering techniques. An effective procedure is to have the clothing checked and separated into different activity levels. Three washings in hot water with detergent should follow for each level. After the initial three washings, the clothing should be washed three times in a warm 1% Versene detergent, then thoroughly rinsed and dried. To be sure that this procedure has freed the clothing of radioactive material, each article should be monitored before it is released for reuse. Rubber and plastic materials are readily decontaminated in a warm detergent wash.

CHAPTER 7

CLINICAL LABORATORY

Introduction

In this chapter we will discuss the classification of bacteria, some of the more common pathogens, and the preparation, staining, and examination of specimens. Also included are basic serologic tests, such as the rapid plasma reagin (RPR) card test for syphilis and the Mono spot test for infectious mononucleosis; the potassium hydroxide (KOH) preparation for the identification of fungi; and the principles and procedures for blood grouping and typing.

Bacteriology

Bacteriology is the study of bacteria. Of primary interest to hospital corpsmen is medical bacteriology which deals with the bacteria that cause disease in man.

Bacteria are prokaryotic microorganisms of the kingdom Protista. They reproduce asexually by binary fission in which the cell divides into two new cells. They are found almost everywhere, the human body harboring vast numbers. Many bacteria are beneficial and essential to human life, only a few are harmful to man.

Since there are thousands of different bacteria, a method of classification is essential. Bacteria are classified according to their (1) disease-producing ability, (2) growth requirements, (3) morphologic characteristics, (4) colonial morphology, (5) biochemical activity, (6) toxins and (7) Gram's stain reaction.

The disease producing ability is termed either pathogenic or non-pathogenic. Pathogens are bacteria that cause diseases and non-pathogens are the harmless bacteria. Many bacteria that are essential to our body are called common or normal flora in their proper environment. For example, alpha streptococcus in the throat is common flora, but when it is found elsewhere, such as in the blood stream, possibly as a result of tooth extraction, it may cause septicemia and endocarditis.

The four growth requirements are (1) temperature, (2) oxygen, (3) nutrition and (4) moisture. Temperature requirements are divided into three categories.

a. Psychrophilic—those that reproduce best at 15° to 20° C

b. Mesophilic—those that reproduce best at 20° to 45° C

c. Thermophilic—those that reproduce best at 50° to 55° C

The oxygen requirements vary according to the amount of oxygen needed for an organism to grow or reproduce. Aerobes are those organisms that reproduce in the presence of oxygen. Obligate aerobes are those that grow only in the presence of free oxygen. Anaerobes are organisms that do not reproduce in the presence of oxygen and obligate anaerobes are those that grow only in the absence of free oxygen and are killed if exposed to free oxygen. Facultative organisms are those that grow both in the presence of free oxygen and in oxygen-free atmosphere. Microaerophilic organisms are those that grow only in reduced amounts of free oxygen.

Nutritionally, different bacteria require different foods which their particular environment must provide. Autotrophic bacteria are self-nourishing and heterotrophic bacteria are not self-sustaining. Moisture is indispensable for bacterial growth.

Morphologic characteristics are based on three distinct shapes or categories:

a. Coccus (pl. cocci)—spherical, appearing singly, in pairs, chains, clusters, or packets.
b. Bacillus (pl. baccilli)—rod-shaped, appearing singly, in chains, or palisades.
c. Spirillum (pl. spirilla)—spiral-, corkscrew-, or comma-shaped, appearing singly only.

A colony is a cohesive mass composed of many millions of bacterial cells, growing on or in a medium, such as blood agar, as a result of the multiplication and division of a single cell. The size, color, shape, edge, topography, consistency and odor of the colony vary with each organism.

Three special structures assist in the classification of bacteria. The capsule is a gummy, gelatinous, or mucoid structure surrounding certain bacteria. The spore is an inactive, resting, and resistant form produced within the organism, usually as a result of unfavorable environmental conditions. The third and final special structure is the flagellum which is a hairlike structure that provides motility.

Toxins generally are waste products of metabolism in a bacterial cell. Some bacteria produce toxins that attack red blood cells in a medium such as blood agar.

a. Alpha hemolysin—produces partial hemolysis and changes the medium to a green color.
b. Beta hemolysin—completely lyses the RBC, leaving a clear zone of hemolysis.
c. Endotoxin (low potency)—comprises part of the cell wall and is released by autolysis of the bacterial cell.
d. Exotoxin (high potency)—is a soluble protein poison that is secreted by the living cell.

Gram's stain reactions can either be positive or negative. Gram-positive reactions will stain dark blue-black. Gram-negative reactions will stain deep pink or reddish.

Common Bacteria

Bacteria are named by genus and species. The first word (capitalized) indicates the genus; the second word (not capitalized) indicates species, a subdivision of genus.

EXAMPLE:	GENUS	SPECIES
	Neisseria	gonorrhoeae

Cocci

Gram-positive cocci (stain dark blue with Gram's stain)
1. Streptococcus pneumoniae—causes pneumonia
2. Beta-hemolytic streptococci Group A—causes strep throat
3. Staphylococcus aureus—most common cause of boils and furuncles as well as osteomyelitis, pneumonia, septicemia, endocarditis and impetigo

Gram-negative cocci (stain dark pink with Gram's stain).

1. Neisseria gonorrhoeae (gonococcus)—causes gonorrhea
2. Neisseria meningitidis (meningococcus)—causes meningitis

Bacilli

Gram-positive bacilli

1. Corynebacterium diphtheriae—causes diphtheria
2. Clostridium (all are anaerobic and spore formers)

   a. C. perfringens (welchii)—causes gas gangrene
   b. C. septicum—causes gas gangrene
   c. C. tetani—causes tetanus or lockjaw
   d. C. botulinum—causes food poisoning (botulism)

Gram-negative bacilli

1. Yersinia (Pasteurella) pestis—causes bubonic or pneumonic plague
2. Brucella abortus—causes undulant fever (brucellosis)
3. Bordetella pertussis—causes whooping cough

Intestinal (Enteric) Gram-Negative Bacilli

Salmonella

1. *S. typhi*—causes typhoid fever
2. *S. paratyphi A* & *B*—causes paratyphoid fever
3. *S. newport* (*S. enteritidis*)—causes gastroenteritis

Shigella—all of these cause bacillary dysentery (shigellosis).

1. *S. dysenteriae* (group A)
2. *S. flexneri* (group B)
3. *S. boydii* (group C)
4. *S. sonnei* (group D)

Vibrio cholerae (*comma*)—causes cholera

Escherichia coli—normally a nonpathogenic organism in the intestine, but if it gets into the abdominal cavity it can cause peritonitis. *E. coli* has also been known to cause urinary tract infections and diarrhea.

Smears

A smear can be made of almost all body discharges, lesions, or sediments obtained by centrifugation of spinal fluid.

Preparation of Smear

1. Smear specimen on a glass slide previously cleaned with alcohol or acetone and polished with lens paper. A thin and evenly spread smear is preferred for easier reading of the smear and identification of various organisms. Emulsify specimen with saline if thick.
2. Label the smear and circle material to be stained with a diamond point pen for easier identification and location of the material after staining.
3. Let the smear air dry. Forced heat drying will distort bacterial cells and other materials.
4. Fix the smear by passing it through a flame (smear side up) 3 to 4 times. DO NOT BURN SMEAR.
5. Let slide cool and then stain.

Gram's Stain

The most common and useful staining procedure used in bacteriologic work is that of Gram. It is most likely to yield valuable information and should be done in all cases when staining is indicated. It is also used for the examination of cultures to determine purity and for purposes of identification.

Hucker's Modification of Gram's Stain

1. Crystal violet/ammonium oxalate solution (primary stain):

Yeast contamination is common and the stain must be filtered before use. Use only certified crystal violet. Gentian violet and methyl violet are not recommended because they contain impurities.

Solution A:

Crystal violet (certified)	2 g
Ethyl alcohol (95 percent)	20 ml

Solution B:

Ammonium oxalate	0.8 g
Distilled water	80 ml

Mix solutions A and B, store for 24 hours, filter, and store at room temperature, in a dark bottle, in a dark place, away from direct sunlight.

2. Iodine solution (mordant):

Iodine crystals (USP)	1 g
Potassium iodide	2 g
Distilled water	300 ml

Grind iodine and potassium iodide in mortar. Dissolve potassium iodide in a flask in as small amount of water as possible. Add iodine crystals to potassium iodide solution. When dissolution is completed, add remainder of distilled water. Mix and let stand at room temperature for 24 hours. Filter and store in a dark bottle, away from direct sunlight.

3. Decolorizer

Acetone	1 volume
Ethyl alcohol (95 percent)	1 volume

Mix 1 volume of acetone with 1 volume of ethyl alcohol and store in a tightly sealed bottle.

4. Safranine 0 counterstain:

Safranine 0	0.25 g
Ethyl alcohol (95 percent)	10 ml
Distilled water	90 ml

Dissolve dye in ethyl alcohol, then add distilled water to dye solution and let stand at room temperature for 24 hours. Filter and store away from direct sunlight.

Procedure for Gram's Staining

After the smear has been dried, heat-fixed, and cooled off, proceed as follows:

1. Place slide on staining rack and cover specimen with crystal violet. Let stand for 1 minute.
2. Wash briefly in tap water and shake off excess.
3. Cover specimen with iodine solution and let stand for 1 minute.
4. Wash with water and shake off excess.
5. Tilt slide at 45° angle and decolorize with the acetone-alcohol solution until the purple color stops running. Wash immediately with water and shake off excess.
6. Cover specimen with safranine and let stand for 30 seconds to 1 minute.
7. Wash with water, shake off excess, and gently blot dry. The smear is now ready to be read. (Use oil immersion lens.)

Principle of Gram's Stain

The crystal violet stain is the primary stain, which stains everything in the smear blue. The Gram's iodine acts as a mordant that causes the crystal violet to penetrate and adhere to the gram-positive organisms. The acetone-alcohol mixture acts as the decolorizer that washes the stain away from everything in the smear except the gram-positive organisms. The safranine is the counter-stain that stains everything in the smear that has been decolorized: pus cells, mucus, gram-negative organisms. The gram-negative organisms will stain a much deeper pink than the pus cells, and mucus will stain even lighter pink than the pus cells.

Reading and Reporting Smears

Place a drop of oil in the slide and, using the oil immersion objective of the microscope, read the smear. All body discharges contain extraneous materials such as pus cells and mucus. Of interest, however, are the types of bacteria that may be present. The stained smear reveals only two things: the morphology and the staining characteristics of the bacteria present. Positive identification requires cultures and further studies.

The hospital corpsman reports only what he or she sees.

EXAMPLE: "Smear shows numerous gram-negative bacilli." If two or more types of bacteria are seen in a smear, the rule is to report them in order of predominance, for example:

1. Numerous gram-positive cocci in clusters
2. Few gram-negative bacilli

Gram-positive organisms are easy to see because they stain a deep blue or blue-black. Gram-negative organisms stain a deep pink, but since the background material is also pink, minute and detailed inspection is necessary before reporting the results.

In the presence of gonorrhea the smear will reveal large numbers of pus cells with varying numbers of intra- and extra-cellular gram-negative, bean-shaped cocci in pairs. Such a finding can be considered diagnostic. It is important to point out that only a few of the thousands of pus cells on the slide may contain bacteria, and sometimes it requires considerable search to find one.

Serology

Serology consists of procedures by which antigens and reacting serum globulin antibodies may be measured qualitatively and quantitatively. Serologic tests have been devised to detect either antigens present or antibodies produced in a number of conditions. Most are based on agglutination reactions between antigen and a specific antibody.

Antigen is a substance which, when introduced into an individual who does not already possess that substance, may stimulate the individual's cells to produce specific antibodies that react to this substance in some detectable way. The four basic characteristics of an antigen are: it must be foreign to the body, it must possess a high molecular weight, it must gain entrance into the body, and it must have a high specificity to stimulate tissues to produce a defensive protein substance called antibody.

Antibodies are the specific defensive proteins produced when an antigen stimulates individual cells. They are produced by the host in response to the presence of an antigen, and are capable of reacting with antigens in some detectable way.

The antigen-antibody reaction takes place as a result of a reaction between specific antibodies in the plasma and antigen present on cell surfaces.

Rapid Plasma Reagin (RPR) Card Test for Syphilis

The RPR test is a sensitive, easily done screening test for syphilis. It is performed on unheated plasma or serum. Everything needed for the test is in a kit available commercially. The antigen suspension used is very stable and can be refrigerated unopened for 1 year. This is very useful aboard ship and at small stations not equipped to do the VDRL.

Preparation of Antigen

1. Attach needle hub to tapered fitting on plastic dispensing bottle.
2. Gently shake antigen ampule to suspend particles and then snap off top at the breakline on the neck of the ampule.
3. Withdraw the antigen suspension into the collapsible dispensing bottle by suction. The antigen is good for 1 month without and 3 months with refrigeration.
4. Upon completing the test, remove the needle, clean it, and replace the screwcap on the dispensing bottle.

Performing the Test

1. Attach the rubber bulb, using the capillary tubes in the kit.
2. Draw the plasma or serum up to the black line on the tube.
3. Place the plasma or serum into one of the test circles of the diagnostic card.
4. Shake the antigen dispensing bottle gently, holding it in a vertical position while squeezing a drop of the antigen onto the test area.
5. Use a clean stirring stick to mix the antigen suspension with the test suspension and spread the mixture over the entire area.
6. Rock the card slowly for a maximum of 4 minutes.
    a. When agglutination occurs in less than 4 minutes, discontinue rocking.
    b. If no agglutination is observed, the full 4 minutes should be used.

Reading and Reporting the Results

1. Originally the test was read microscopically, but the addition of charcoal particles to the antigen now permits nonmicroscopic identification of the flocculation or agglutination.
2. Report test as

    a. Reactive if specimen shows agglutination or flocculation.
    b. Nonreactive if specimen shows no agglutination at the end of four minutes.
    c. If the RPR test is reactive, an FTA-ABS test must be run on the specimen.

Monospot Slide Test (FSN 6505-01-005-4375) for Infectious Mononucleosis

The main reason for including this test is that mononucleosis imitates many diseases so well that diagnosis is confirmed only by selective serologic testing.

Principle of the Test

1. Absorption of serum with a suspension of a guinea pig or horse kidney antigen removes antisheep agglutinins in the serum of patients with serum diseases and various infectious diseases.
2. In some serum of patients with infectious mononucleosis a substantial part of the antibodies remains after absorption.
3. Absorption with a suspension of beef cells removes the antisheep agglutinins in infectious mononucleosis, but leaves them in other infectious diseases.

Rapid slide tests for infectious mononucleosis are based on these principles. Suspensions of guinea pig kidney and beef erythrocyte stomata result in satisfactory instant absorption of antibodies and clear differentiation between infectious mononucleosis and noninfectious mononucleosis sera. Infectious mononucleosis antibodies may be demonstrated as early as the 4th day of illness and practically always by the 21st day. Positive results may continue for several months.

Procedure

1. On a clean slide (supplied with kit) place one drop of guinea pig antigen, reagent I, into box number 1.
2. Place one drop of the beef erythrocyte stomata, reagent II, into box number 2.
3. Add one drop of test serum on plasma to both boxes. Mix each with separate sticks.
4. Add one drop of horse erythrocyte antigen (supplied with kit) to both boxes. Mix each with separate disposable sticks.
5. Rock slide back and forth for 2 minutes so that liquid flows slowly over the entire area of the boxes.
6. Read results after 2 minutes.

   a. Agglutination in box 1 is positive for infectious mononucleosis.
   b. Agglutination in box 2 is positive for noninfectious mononucleosis.
   c. No agglutination in either box is negative for mononucleosis.

A positive control is included in each kit for the purpose of checking the effectiveness of the reagents.

Fungus (pl. fungi)

Fungi are heterotrophic, chlorophyll-free, thallophyllic organisms. They reproduce by spores, which germinate into long filaments called hyphae. As the hyphae continue to grow and branch, they develop into a mat of growth called the mycelium (pl. mycelia). From the mycelium, spores are produced in characteristic arrangements. These spores, when dispersed to new substances, germinate and form new growths. Reproduction is often asexual, usually by budding, as in yeast, but certain fungi have sexual reproduction.

Common superficial infections of the skin caused by fungi are athlete's foot and ringworm of the scalp.

Potassium Hydroxide (KOH) Preparation for Identification of Fungi

Fungi are seen in clustered round buds with thick walls accompanied by fragments of mycelia. Scrapings from the affected area of the skin are mounted in 10 percent potassium hydroxide for positive laboratory diagnosis.

Demonstration of the fungi in infected tissue can be accomplished by the following method:

1. Place skin, hair, or nail scrapings from the affected area on a slide and add a drop of 10 percent potassium hydroxide. Dissolve 10 g of potassium hydroxide (KOH) in 100 ml of distilled water.
2. Place a coverslip on the preparation.
3. Warm the preparation gently over a flame, being careful not to boil it, and allow it to stand until clear. Do not allow preparation to dry out.
4. Read preparation, using high-power objective with subdued light.

   a. Fungi in skin and nails appear as refractile fragments of hyphae.
   b. In hair, fungi appear as dense clouds around the hair stub or as linear rows inside the hair shaft.

Blood Grouping

Blood transfusion, the term used for the process of transferring blood from one person to another, is often a lifesaving remedy, especially in cases of severe hemorrhage, anemia, and infection.

In 1900 Landsteiner discovered the first blood group system which initially comprised groups A, B, and O. Later the AB system was added.

The work showing that blood can be classified into these four groups was done by random crossmatching of the bloods of a large number of people. Two specific antigens (also called agglutinogens) were found on the red cells. These were called A and B. One group of red cells contained no A or B antigen and was called O. A fourth group contained both A and B antigens and was called AB. Antibodies (agglutinins) were found in the serum of blood. These were called anti-A and anti-B antibodies. A person of group A blood (A antigen) has anti-B antibodies (agglutinins) in the serum. A group B individual has anti-A antibodies; a group O individual has both anti-A and anti-B antibodies; and group AB individuals have neither antibody in the serum. With the exception of certain patients with autoimmune diseases, individuals do not have antibodies against their own blood type.

Landsteiner's rule states that when an antigen is on a red blood cell, the corresponding antibody is never present simultaneously. Instead, the reciprocal red cell antigen is present in the plasma or serum. For example, if an individual has blood cells of group A, anti-B antibodies are always present in the serum but never anti-A.

Blood grouping is accomplished by comparing the effects of agglutination by the antibodies on the corresponding antigens within the red cells.

To determine the group to which blood belongs it is necessary to mix separately a suspension of its red cells with serum of a known group A and a group B that contains agglutinin B and agglutinin A, respectively. The resulting agglutination or absence of agglutination determines the group to which it belongs and is a necessary procedure with the blood of both the donor and the recipient. Only compatible blood is selected for transfusion. One of the four combinations of reactions shown in the following table will result.

Table 7-1.—Agglutination Reactions of the Red Cells of the Four Blood Groups

International Blood Group	Anti-A	Anti-B
O	–	–
A	+	–
B	–	+
AB	+	+

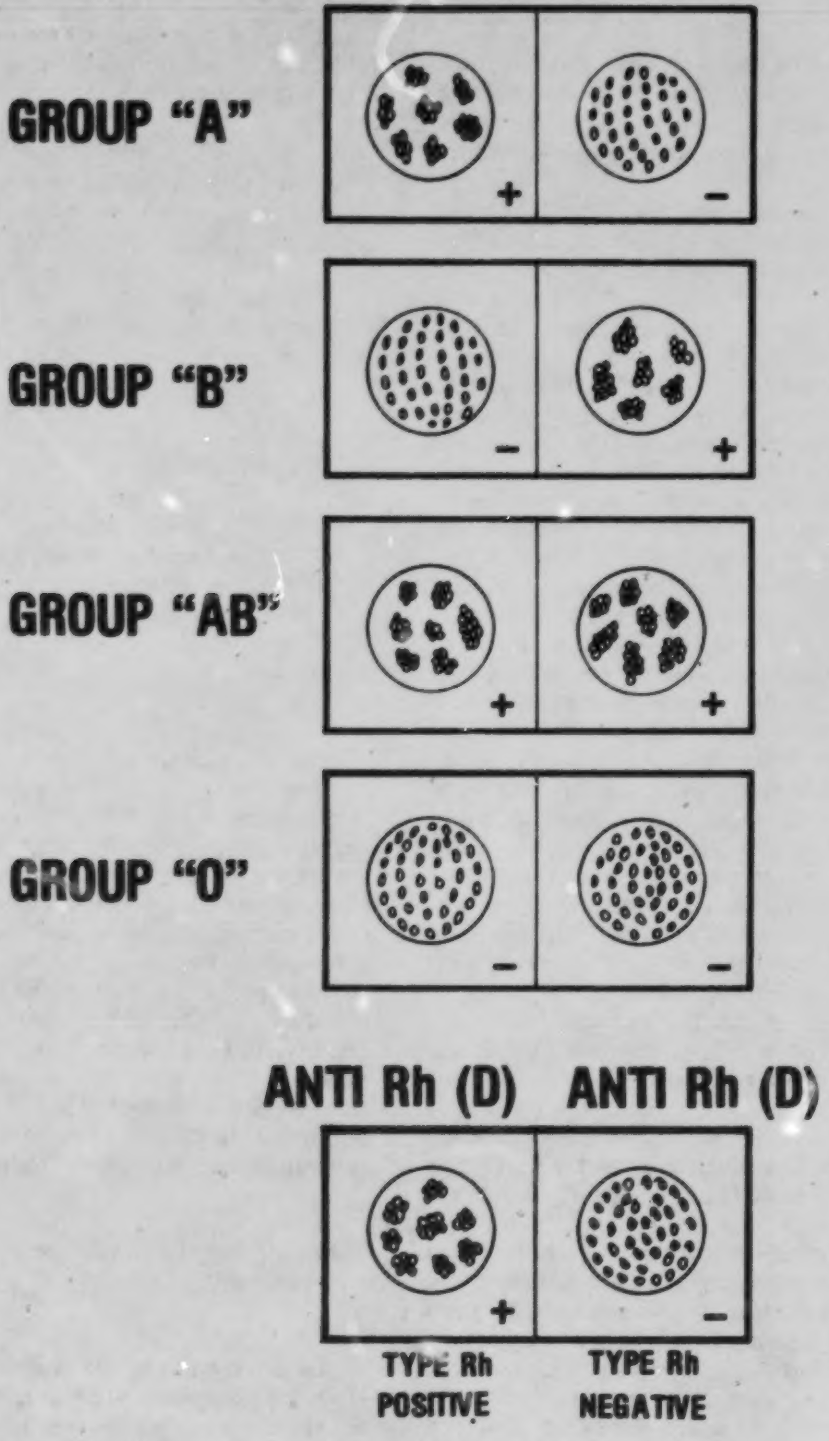
– Denotes absence of agglutination
+ Denotes presence of agglutination

Rh Factors

The most important Rh factor is factor D. Approximately 85% of the population is D positive (also called Rh positive), and 15% is D negative (also called Rh negative). Agglutinin for Rh+ does not normally occur in the blood. Consequently, Rh+ corpuscles do not produce reactions in first transfusions. However, the agglutinogen, when present in large amounts in the blood of recipients, may produce reactions upon transfusion with Rh+ corpuscles. Consequently, it is mandatory to select compatible donors whose corpuscles are Rh– for transfusion of Rh– individuals. This is especially important in those who have had previous transfusions (especially with Rh+ corpuscles).

Technique for Blood Grouping and Typing

Determination of the A and B agglutinogen is called grouping, while determination of the Rh agglutination is called typing (fig 7-1.) Color-coded Anti-A (blue), NSN 6505-00-975-0614,


GROUP "A"
+
−
GROUP "B"
−
+
GROUP "AB"
+
+
GROUP "O"
−
−
ANTI Rh (D)
ANTI Rh (D)
+
−
TYPE Rh POSITIVE
TYPE Rh NEGATIVE

159.26

Figure 7-1.—Blood Grouping and Typing.

Anti-B (yellow), NSN 6505-00-975-0613, are available through the Navy Supply System.

Blood grouping for the A-B-O system is performed at room temperature. A blood specimen is drawn and allowed to clot. The erythrocytes are resuspended in the serum by mechanical agitation, and single drops are placed on a clean glass slide by dropper. Colored specific sera are added, and each drop of blood and antiserum are individually mixed with a clean applicator stick. The preparation is observed for agglutination. If agglutination takes place, the red cells gather in clumps. If there is no agglutination, the red cells will be evenly distributed over the field. (See fig. 7-1)

The rouleaux formation is another phenomenon that causes trouble in blood typing. It is caused by sera with high globulin content and appears as "red cells stacked up like a pile of coins." Rouleaux formation can easily be confused with true agglutination. CAUTION: Droppers must be used only in their respective sera and cell suspensions to prevent cross-contamination. Applicator sticks used for mixing anti-A and the cell suspension must not be used for mixing anti-B and the cell suspension, and vice versa.

Responsibilities in the Clinical Laboratory

As a hospital corpsman you need to know how to perform the tests discussed in this chapter, especially when you are on duty independent of a medical officer. Although you are not expected to diagnose or treat a patient based on the test findings, you must be able to convey a clear clinical picture to your supporting medical officer to effect prompt, efficient, and professional patient care.

It is very important that the patient, as well as the specimens received, be promptly and properly identified to prevent errors and to minimize future embarrassment and medical complications.

Another important facet of clinical laboratory is the proper use of laboratory forms. Use separate forms for each patient and each type of test. The forms must be filled out completely, accurately, and legibly to ensure expeditious disposition of completed reports. In addition, they must be properly filed and recorded.

In the laboratory you constantly will be dealing with the numerous laboratory forms associated with the tests being performed. These forms when used properly will minimize confusion and reduce chances for errors. For a complete listing of these forms and their purposes, refer to BUMED Manual, Chapter 23.

Ethics in the Laboratory

You are expected to treat all laboratory tests and their results as a confidential matter. Interpretation of the results must be left to the attending physician. Refrain from discussing laboratory results with the patient. It is your ultimate responsibility to safeguard laboratory results from unauthorized access by persons not directly involved. Remember that knowledge of the tests and their results are accessible only to the patient, the attending physician, and you—the performing technician.

CHAPTER 8

NAVAL ORGANIZATION

As you advance in rate, you will become more involved in Medical Department administration, the "paperwork" required of any functioning organization. To perform effectively within the organization, you must understand the structure of the Navy, its relationship to other organizations, and the relationship between the various components within the Navy. It is also important that you understand your relationship to these organizations.

THE CHAIN OF COMMAND

Let us begin with you, as a senior corpsman. If there are others below you, they look to you as their first step in the chain of command. You, in turn, are responsible to your division officer, who reports to the executive officer (XO), who in turn represents and reports to the commanding officer (CO). As far as the internal function of the ship is concerned, the organization culminates there; however, the CO reports to the type commander, on up the line to the Chief of Naval Operations (CNO), through the Secretary of the Navy (SECNAV), the Secretary of Defense (SECDEF), and eventually to the President of the United States.

Compared to civilian businesses, the Navy is a massive organization. It operates on the assumption that every individual knows what is expected of him or her in any given situation. Jobs run the gamut from the recruit who swabs the deck to the President, who is Commander in Chief of all the Armed Forces. Since the President cannot become involved with telling the recruit how, when, and where to swab the deck, the task is delegated to others through the chain of command.

DELEGATION OF AUTHORITY

Delegating authority means assigning authority to certain individuals within the command, from the top downwards through the chain of command, to accomplish the task at hand. To achieve an effective Navy, authority is delegated down the chain of command at all levels, from the Commander in Chief to the last individual in the orgainzation. The delegation of authority and the issuance of orders and instructions by people in the naval service does not relieve such people from any responsibility imposed on them. They must ensure that the delegated authority is properly exercised and the orders are properly executed. The Navy expects all individuals to fully understand the command organization and to function in their capacity within the command.

DEPARTMENT OF DEFENSE

The Department of Defense (DOD) consists of the Office of the Secretary of Defense (OSD), the Joint Chiefs of Staff (JCS), the Joint Staff, the unified and specified commands, as well as the Departments of the Army, the Navy, and the Air Force.

DEPARTMENT OF THE NAVY

The Department of the Navy (DN) is organized under SECNAV and operates under the authority, direction, and control of the SECDEF. The DN is composed of three major elements: the Navy Department, the Shore Establishment, and the Operating Forces.

In time of war or when directed by the President, the U.S. Coast Guard comes under the DN but at all other times is a part of the Department of Transportation (DOT).

The Navy Department is the executive part of the DN and is located at the seat of Government. Members of the Navy Department include the SECNAV, the Chief of Naval Operations (CNO), the Naval Material Command, the Bureau of Medicine and Surgery, the Commandant of the Marine Corps, the Judge Advocate General (JAG), the Office of the Comptroller, and Headquarters, U.S. Coast Guard (when operating as part of the DN).

The Shore Establishment is composed of the systems commands under the Office of the Chief of Naval Material; various naval support commands such as Naval Education and Training, Naval Intelligence, and Naval Telecommunications. The Marine Corps support establishment and the Marine Corps Reserve are also components of the shore establishment.

The Operating Forces are composed of several fleets, seagoing forces, district forces, sea frontier forces, the Military Sealift Command, the Fleet Marine Forces, the operating elements of the Coast Guard (when assigned), and all other forces, commands, and activities not otherwise assigned. Figure 8-1 shows basic organization of the DN.

THE BUREAU OF MEDICINE AND SURGERY

The Bureau of Medicine and Surgery (BUMED) is the control agency of the Navy Medical Department. Under the direction of the SECNAV and the CNO, the Surgeon General (Chief, BUMED) is responsible for providing all technical and professional assistance required to:

- Safeguard and promote the health of Navy and Marine Corps personnel
- Provide guidance in the care and treatment of sick and injured Navy and Marine Corps personnel and their dependents, and other personnel as authorized by law.

The BUMED organizational chart is shown in figure 8-2.

The Navy Medical Department

The Medical Department is charged with maintaining the health of the Navy through the promotion of physical fitness, the prevention and control of diseases and injuries, and the treatment and care of the sick and injured. To fulfill this responsibility, the Medical Department is actively concerned with all phases of Navy life and advises all echelons of the Navy on matters affecting the health of naval personnel.

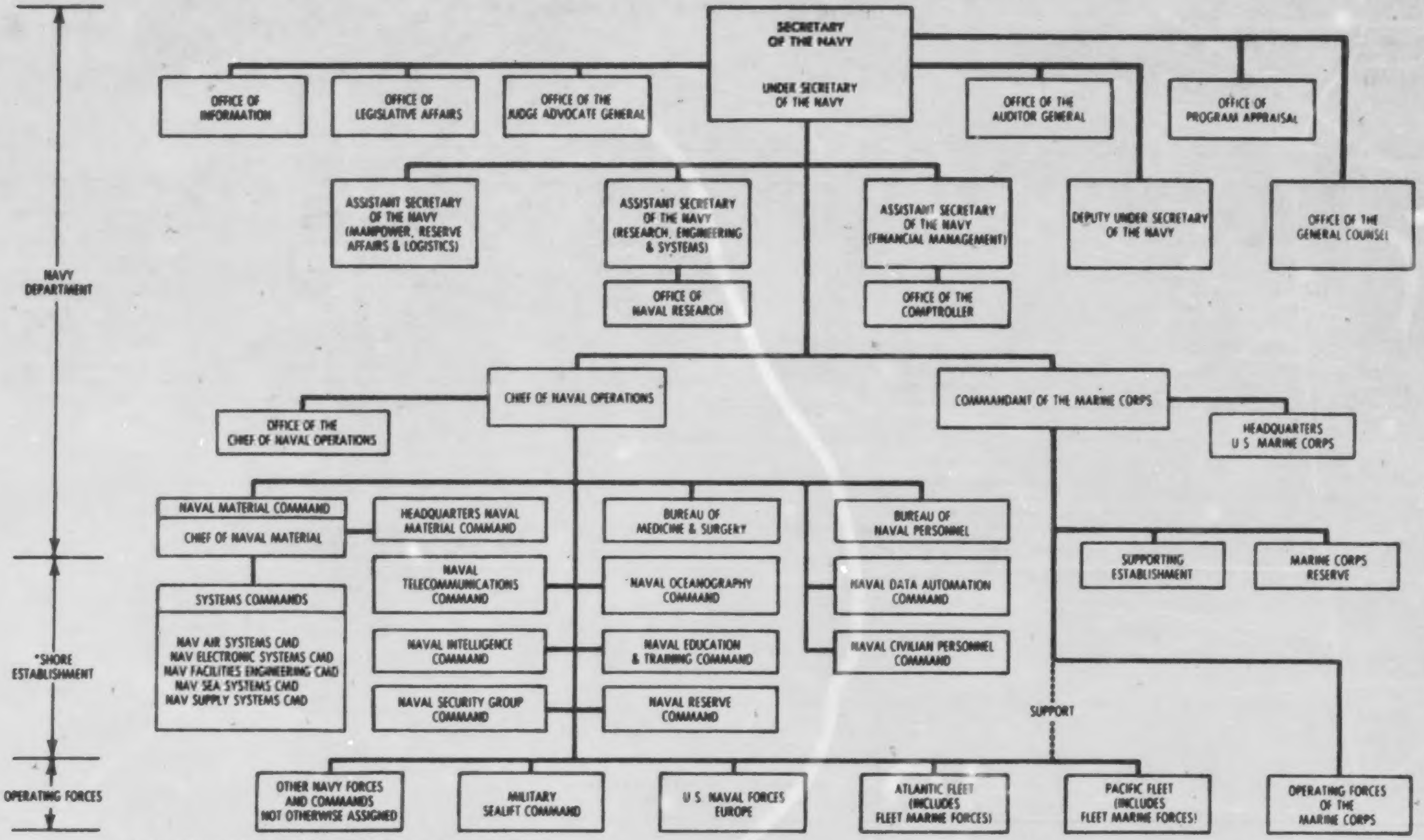
The Medical Department is comprised of five corps:

- Medical Corps (physicians and medical students)
- Dental Corps (dentists)
- Medical Service Corps (administrators and allied scientists)
- Nurse Corps (registered nurses)
- Hospital Corps (enlisted medical personnel)

The Medical, Dental, Medical Service, and Nurse Corps are comprised of commissioned officers. The students in the Medical Corps attend civilian medical schools and perform a brief period of active duty for training each year. Navy students attending the Uniformed Services University of the Health Sciences also hold commissions in the Medical Corps.

The Hospital Corps is the only enlisted corps in the Navy. Hospital Corps personnel are trained in Hospital Corps Class "A" School, and may receive further training in the health sciences through formal school in such areas as X-ray, pharmacy, and so forth.

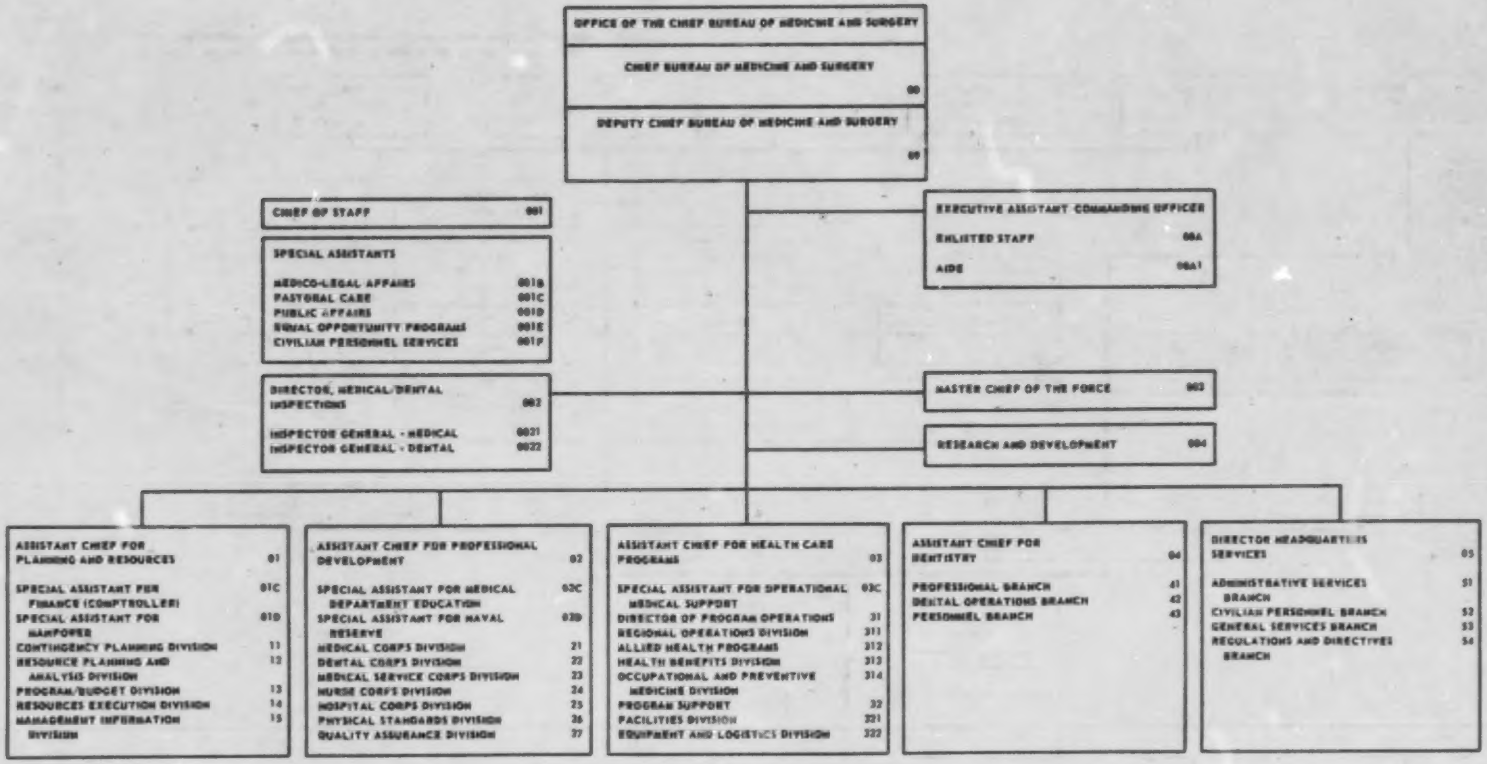
The Dental Technician Rating is composed of enlisted personnel trained to assist dental officers. Like hospital corpsmen, dental technicians are trained through basic "A" School and other formal programs.


NAVY DEPARTMENT
*SHORE ESTABLISHMENT
OPERATING FORCES
SECRETARY OF THE NAVY
UNDER SECRETARY OF THE NAVY
OFFICE OF INFORMATION
OFFICE OF LEGISLATIVE AFFAIRS
OFFICE OF THE JUDGE ADVOCATE GENERAL
OFFICE OF THE AUDITOR GENERAL
OFFICE OF PROGRAM APPRAISAL
ASSISTANT SECRETARY OF THE NAVY (MANPOWER, RESERVE AFFAIRS & LOGISTICS)
ASSISTANT SECRETARY OF THE NAVY (RESEARCH, ENGINEERING & SYSTEMS)
ASSISTANT SECRETARY OF THE NAVY (FINANCIAL MANAGEMENT)
DEPUTY UNDER SECRETARY OF THE NAVY
OFFICE OF THE GENERAL COUNSEL
OFFICE OF NAVAL RESEARCH
OFFICE OF THE COMPTROLLER
CHIEF OF NAVAL OPERATIONS
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
COMMANDANT OF THE MARINE CORPS
HEADQUARTERS U S MARINE CORPS
NAVAL MATERIAL COMMAND
CHIEF OF NAVAL MATERIAL
HEADQUARTERS NAVAL MATERIAL COMMAND
SYSTEMS COMMANDS
NAV AIR SYSTEMS CMD
NAV ELECTRONIC SYSTEMS CMD
NAV FACILITIES ENGINEERING CMD
NAV SEA SYSTEMS CMD
NAV SUPPLY SYSTEMS CMD
NAVAL TELECOMMUNICATIONS COMMAND
NAVAL INTELLIGENCE COMMAND
NAVAL SECURITY GROUP COMMAND
BUREAU OF MEDICINE & SURGERY
NAVAL OCEANOGRAPHY COMMAND
NAVAL EDUCATION & TRAINING COMMAND
NAVAL RESERVE COMMAND
BUREAU OF NAVAL PERSONNEL
NAVAL DATA AUTOMATION COMMAND
NAVAL CIVILIAN PERSONNEL COMMAND
SUPPORTING ESTABLISHMENT
MARINE CORPS RESERVE
SUPPORT
OTHER NAVY FORCES AND COMMANDS NOT OTHERWISE ASSIGNED
MILITARY SEALIFT COMMAND
U S NAVAL FORCES EUROPE
ATLANTIC FLEET (INCLUDES FLEET MARINE FORCES)
PACIFIC FLEET (INCLUDES FLEET MARINE FORCES)
OPERATING FORCES OF THE MARINE CORPS

* Also includes other designated shore activities, not shown on the chart, which are under the command or supervision of many of the organizations depicted.

159.27

Figure 8-1.—Organization of the Department of the Navy.


OFFICE OF THE CHIEF BUREAU OF MEDICINE AND SURGERY
CHIEF BUREAU OF MEDICINE AND SURGERY 00
DEPUTY CHIEF BUREAU OF MEDICINE AND SURGERY 09
CHIEF OF STAFF 001
SPECIAL ASSISTANTS
MEDICO-LEGAL AFFAIRS 001B
PASTORAL CARE 001C
PUBLIC AFFAIRS 001D
EQUAL OPPORTUNITY PROGRAMS 001E
CIVILIAN PERSONNEL SERVICES 001F
EXECUTIVE ASSISTANT COMMANDING OFFICER
ENLISTED STAFF 09A
AIDE 09A1
DIRECTOR, MEDICAL/DENTAL INSPECTIONS 002
INSPECTOR GENERAL - MEDICAL 0021
INSPECTOR GENERAL - DENTAL 0022
MASTER CHIEF OF THE FORCE 003
RESEARCH AND DEVELOPMENT 004
ASSISTANT CHIEF FOR PLANNING AND RESOURCES 01
SPECIAL ASSISTANT FOR FINANCE (COMPTROLLER) 01C
SPECIAL ASSISTANT FOR MANPOWER 01D
CONTINGENCY PLANNING DIVISION 11
RESOURCE PLANNING AND ANALYSIS DIVISION 12
PROGRAM/BUDGET DIVISION 13
RESOURCES EXECUTION DIVISION 14
MANAGEMENT INFORMATION DIVISION 15
ASSISTANT CHIEF FOR PROFESSIONAL DEVELOPMENT 02
SPECIAL ASSISTANT FOR MEDICAL DEPARTMENT EDUCATION 02C
SPECIAL ASSISTANT FOR NAVAL RESERVE 02D
MEDICAL CORPS DIVISION 21
DENTAL CORPS DIVISION 22
MEDICAL SERVICE CORPS DIVISION 23
NURSE CORPS DIVISION 24
HOSPITAL CORPS DIVISION 25
PHYSICAL STANDARDS DIVISION 26
QUALITY ASSURANCE DIVISION 27
ASSISTANT CHIEF FOR HEALTH CARE PROGRAMS 03
SPECIAL ASSISTANT FOR OPERATIONAL MEDICAL SUPPORT 03C
DIRECTOR OF PROGRAM OPERATIONS 31
REGIONAL OPERATIONS DIVISION 311
ALLIED HEALTH PROGRAMS 312
HEALTH BENEFITS DIVISION 313
OCCUPATIONAL AND PREVENTIVE MEDICINE DIVISION 314
PROGRAM SUPPORT 32
FACILITIES DIVISION 321
EQUIPMENT AND LOGISTICS DIVISION 322
ASSISTANT CHIEF FOR DENTISTRY 04
PROFESSIONAL BRANCH 41
DENTAL OPERATIONS BRANCH 42
PERSONNEL BRANCH 43
DIRECTOR HEADQUARTERS SERVICES 05
ADMINISTRATIVE SERVICES BRANCH 51
CIVILIAN PERSONNEL BRANCH 52
GENERAL SERVICES BRANCH 53
REGULATIONS AND DIRECTIVES BRANCH 54

159.28

Figure 8-2.—Organization of BUMED.

Naval Regional Medical Officers and Directors of Dental Activities or District Dental Officers

The Navy Department assigns a Naval Regional Medical Officer and Director of Dental Activities or Naval Regional Dental Officer to the staff of the commandant of each naval district.

Navy Regional Health Care System

Naval regional medical centers (NRMCs) and naval hospitals are the principal organizational entities comprising the naval regional health care system. The NRMC is a single organization under the direction of a commanding officer tasked to provide health care to the total eligible population of the area. Similarly, naval hospitals and their component activities are responsible for total heath care delivery within assigned geographic areas.

The objectives of regionalizing naval medical treatment facilities are to:

- Increase and improve health care services to all beneficiaries.
- Improve patient, staff, and command satisfaction with health care services provided.
- Achieve more efficient, economical, and effective use of health care resources.
- Achieve organizational uniformity within the naval regional health care system to simplify and expedite:
    - Collecting and submitting management information data.
    - Orientating personnel in initial and subsequent assignments at NRMCs and hospitals.
    - Administering BUMED programs throughout the regional health care system.

Naval Regional Medical Centers and Hospitals

NRMCs, naval hospitals, and all their subordinate units are assigned reponsibility for the care and treatment of the sick and injured in the following order:

- Primary Mission
    - The care and treatment of military personnel to expedite their return to full duty.
    - The prompt disposition of patients who require special treatment not satisfactorily available, or who are physically unfit for retention in the Navy.
- Secondary Mission
    - Instruction of Medical Department personnel.
    - Care and treatment of all eligible beneficiaries.
    - Authorized research and development.
    - Cooperation with other military and civil authorities in matters pertaining to health and sanitation.

The basic organization of NRMCs and Naval hospitals is outlined in figure 8-3.

Special Assistants

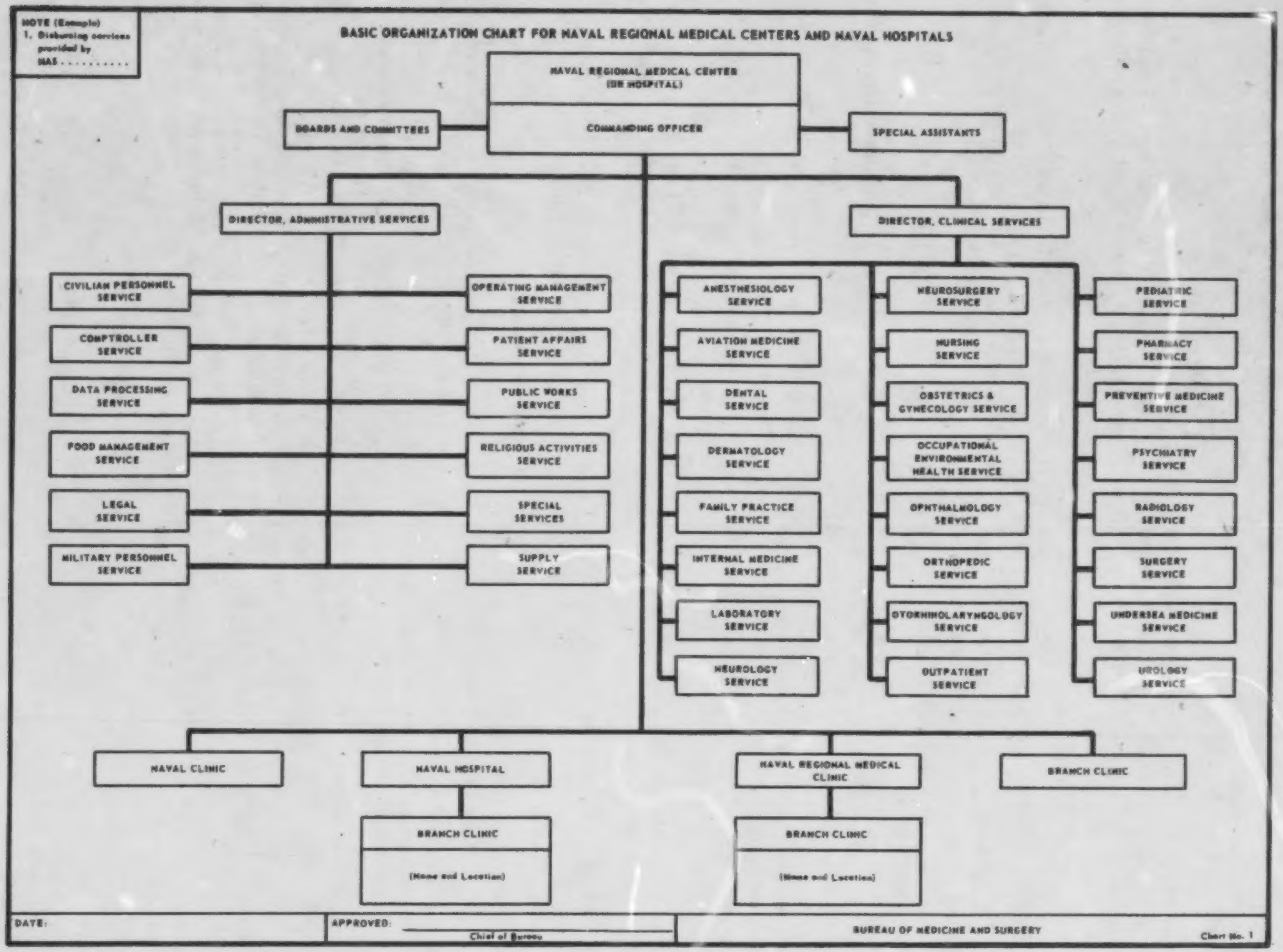
The following are special assistants to the commanding officer:

Senior Chaplain
Regional Health Care Coordinator
Field Director, American Red Cross
Director of Nursing
Safety Officer
Comptroller
Civilian Personnel Officer
Equal Opportunity Assistant
Senior Enlisted Advisor
Public Affairs Officer

Although the special assistants listed above are assigned to most Naval hospitals, others may be appointed as needed.

Clinical Services

Commanding officers may establish authorized clinical services at their discretion, based on the size and character of the patient


NOTE (Example)
1. Disbursing services provided by NAS . . . .
BASIC ORGANIZATION CHART FOR NAVAL REGIONAL MEDICAL CENTERS AND NAVAL HOSPITALS
NAVAL REGIONAL MEDICAL CENTER (OR HOSPITAL)
COMMANDING OFFICER
BOARDS AND COMMITTEES
SPECIAL ASSISTANTS
DIRECTOR, ADMINISTRATIVE SERVICES
DIRECTOR, CLINICAL SERVICES
CIVILIAN PERSONNEL SERVICE
COMPTROLLER SERVICE
DATA PROCESSING SERVICE
FOOD MANAGEMENT SERVICE
LEGAL SERVICE
MILITARY PERSONNEL SERVICE
OPERATING MANAGEMENT SERVICE
PATIENT AFFAIRS SERVICE
PUBLIC WORKS SERVICE
RELIGIOUS ACTIVITIES SERVICE
SPECIAL SERVICES
SUPPLY SERVICE
ANESTHESIOLOGY SERVICE
AVIATION MEDICINE SERVICE
DENTAL SERVICE
DERMATOLOGY SERVICE
FAMILY PRACTICE SERVICE
INTERNAL MEDICINE SERVICE
LABORATORY SERVICE
NEUROLOGY SERVICE
NEUROSURGERY SERVICE
NURSING SERVICE
OBSTETRICS & GYNECOLOGY SERVICE
OCCUPATIONAL ENVIRONMENTAL HEALTH SERVICE
OPHTHALMOLOGY SERVICE
ORTHOPEDIC SERVICE
OTORHINOLARYNGOLOGY SERVICE
OUTPATIENT SERVICE
PEDIATRIC SERVICE
PHARMACY SERVICE
PREVENTIVE MEDICINE SERVICE
PSYCHIATRY SERVICE
RADIOLOGY SERVICE
SURGERY SERVICE
UNDERSEA MEDICINE SERVICE
UROLOGY SERVICE
NAVAL CLINIC
NAVAL HOSPITAL
NAVAL REGIONAL MEDICAL CLINIC
BRANCH CLINIC
BRANCH CLINIC
(Name and Location)
BRANCH CLINIC
(Name and Location)
DATE:
APPROVED:
Chief of Bureau
BUREAU OF MEDICINE AND SURGERY
Chart No. 1

159.29

Figure 8-3.—Organization of NRMCs and Naval Hospitals.

population, health care resources available, and specialty requirements. The Director of Clinical Services (DCS) is responsible to the commanding officer for the operation of the clinical functions of the command.

Each service is headed by a chief of service. Each branch, section, or unit thereunder is headed by a branch head.

Administrative Services

The commanding officer may establish a Director of Administrative Services (DAS) based on the resources available and the administrative requirements of the command. The DAS is responsible to the commanding officer for health care administration and management functions of the command.

A complete listing of clinical and administrative services and the functions and missions of each are contained in BUMEDINST 5450.4 series, Organization Manual for Naval Regional Medical Centers and Naval Hospitals.

Medical Treatment Facilities

Medical treatment facilities of the Department of the Navy are classified as either fixed or nonfixed.

Fixed Medical Treatment Facilities

- Medical Center. A specially designated hospital that provides health care for all authorized personnel within its geographic area of responsibility. Medical centers also provide a wide range of specialized consultant services for all other medical activities in the area.

- Hospital. A health treatment facility capable of providing definitive inpatient care. It provides diagnostic and therapeutic services in general medicine and surgery and preventive medicine services. A hospital may, in addition, serve as a clinic.

- Clinic. A health treatment facility that provides emergency treatment and outpatient care. A clinic also performs certain nontherapeutic services, such as physical examinations, immunizations, medical administration, and preventive medicine services necessary to support a primary military mission. A clinic may be equipped with beds for observing patients awaiting transfer to a hospital, and for the care of patients who cannot be cared for on an outpatient basis, but who do not require a major hospital facility.

To differentiate between the various administrative types of medical centers, hopsitals, and clinics, the following titles are used:

- Naval Regional Medical Center or Naval Hospital (location), for a medical center or hospital that is an established shore (field) activity with a commanding officer, under the command of BUMED.

- Naval Regional Medical Clinic (location), for a clinic assigned as an established shore (field) activity with a commanding officer, under the command and support of BUMED.

- Branch Clinic (activity, location), for a clinic assigned to a BUMED activity, that is located at and supports an activity under an officer other than a Medical Department Officer.

The titles of activities located outside of the United States are preceded by the abbreviation U.S.

Nonfixed Medical Treatment Facilities

- Medical facilities for field service with the Marine Corps, such as aid stations, clearing stations, and division field and force evacuation hospitals.

- Medical facilities afloat, such as hospital ships, sick bays aboard ship. (Currently there are no hospital ships in the active fleet.)

- The medical advance base component contained within mobile units such as construction battalions, cargo handling battalions, and so forth.

MEDICAL DEPARTMENT SUPPORT TO THE FLEET MARINE FORCE (FMF)

To understand the complexity of medical support to the FMF, you must first be familiar with its overall organization.

The FMF is a balanced force of combined air and ground troops trained, organized, and equipped primarily for offensive amphibious employment. It may consist of a headquarters, force troops, a force service support group (FSSG), one or more Marine divisions, brigades, and aircraft wings. Each of these units is assigned a specific number of medical support personnel, providing an interrelated network of medical support.

FMF Medical Support

In general, Medical Department personnel serving with the FMF may be divided into:

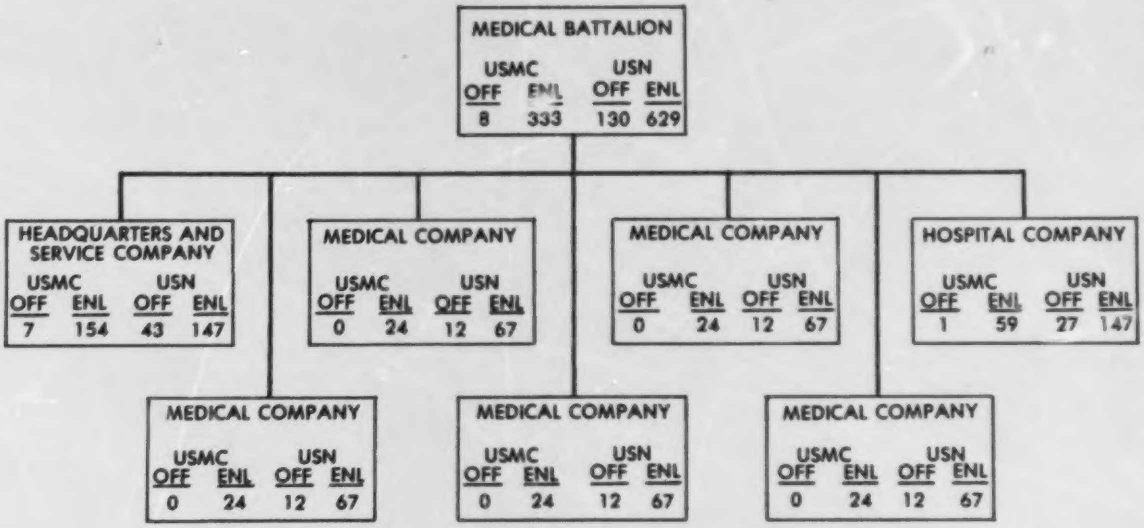
- Combat personnel, who provide medical care and initial first aid to prepare the casualty for further evacuation; and
- Support personnel, who provide surgical and medical aid to those who need early definitive care and cannot be further evacuated.

Medical personnel are an integral part of the combat unit to which they are assigned; they train with their units and live with and accompany them at all times.

All of the units comprising a FMF have some Medical Department personnel organic to them. However, the majority of medical support comes from the medical battalion of the FSSG. The FSSG is a composit grouping of functional units that provide combat service support beyond the organic capability of the supported units to all elements of the FMF.

The medical battalion provides combat medical support required for independently deployed battalion landing teams (BLTs), regimental landing teams (RLTs), Marine amphibious units (MAUs), or Marine amphibious brigades (MABs). The primary mission of the medical battalion is to provide:

- Casualty collection
- Emergency treatment


MEDICAL BATTALION
USMC USN
OFF ENL OFF ENL
8 333 130 629
HEADQUARTERS AND SERVICE COMPANY
USMC USN
OFF ENL OFF ENL
7 154 43 147
MEDICAL COMPANY
USMC USN
OFF ENL OFF ENL
0 24 12 67
MEDICAL COMPANY
USMC USN
OFF ENL OFF ENL
0 24 12 67
HOSPITAL COMPANY
USMC USN
OFF ENL OFF ENL
1 59 27 147
MEDICAL COMPANY
USMC USN
OFF ENL OFF ENL
0 24 12 67
MEDICAL COMPANY
USMC USN
OFF ENL OFF ENL
0 24 12 67
MEDICAL COMPANY
USMC USN
OFF ENL OFF ENL
0 24 12 67

159.28A

Figure 8-4.—Organization of a Medical Battalion.

- Temporary hospitalization
- Specialized surgery
- Evacuation
- Graves registration support

In addition, medical battalions must plan, supervise, and coordinate timely preventive measures for controlling disease.

The medical battalion consists of a headquarters and service company, five medical companies, and one hospital company as shown in figure 8-4.

CHAPTER 9

NAVAL MANUALS, DIRECTIVES AND REPORTS

In the last chapter you became familiar with the organization of the Navy Department. To make this organization work, a standardized method of communicating is needed, as provided by different manuals and directives. You must become familiar with these publications and learn how to use them to find the information you need. Read them in your spare time and enter changes in them as they are issued. This is one of the best ways to become familiar with them.

NAVY REGULATIONS

This manual, divided into chapters and articles, shows the principles that guide the Department of the Navy. Its contents define the duties, responsibilities, authority, distinctions, and relations of many organizational parts and individuals to each other. Other Navy publications expand on much of the material found here. Navy Regs and each of the publications discussed in this chapter are published in adjustable ring binders so that changes can easily be made.

Changes to these publications are issued periodically. They may be in the form of printed insertions, replacement pages, or instructions for correcting the existing copy with pen and ink. Before changes to Navy Regs are issued, they are reviewed by the Chief of Naval Operations, the Commandant of the Marine Corps, the Judge Advocate General, the chiefs of bureaus and offices, and commanders of various systems commands. The changes are approved and signed by the Secretary of the Navy.

STANDARD ORGANIZATION AND REGULATIONS OF THE U.S. NAVY

This manual, issued as OPNAVINST 3120.32 by the Chief of Naval Operations, puts forth regulations governing all members of the U.S. Navy. Two styles of print are used in these regulations: The material in italicized type is regulatory. These regulations apply to each individual. Violation of any part of these regulations is punishable under the UCMJ. The material printed in plain type is for the guidance of commanders, commanding officers, and officers in charge.

BUREAU OF NAVAL PERSONNEL MANUAL

The *Bureau of Naval Personnel Manual* (BUPERSMAN), NAVPERS 15791B, is issued in looseleaf form and contains articles governing the administration of Navy personnel.

When referring to articles in the manual, use one of the following three methods:

1. *Bureau of Naval Personnel Manual,* Article 3860280.
2. BUPERSMAN 3860280.
3. Article 3860280 of the *Bureau of Naval Personnel Manual.*

Each article is identified by a seven-digit number. The first two digits identify the chapter. The next two digits identify the section in the chapter. The last three digits identify the article in the section. Although written together (e.g., 3860280), the article number should be spoken as though it were three separate groups of numbers (e.g., 38 60 280). Numbers are not always assigned consecutively, and once an article is dropped, the number is not used again.

In the manual, chapters and sections are not titled. Chapters begin at the top of a right-hand page.

You will find the alphabetical subject-matter index at the back of the manual more helpful than the table of contents in finding articles quickly. For example, assume that your commanding officer wants to know the course of action that should be taken to separate an enlisted service member for the convenience of the government. Unless you have memorized your table of contents, it will be hard for you to find this subject since the table of contents is a sequential listing of article numbers. When you turn to your index, you find that its alphabetical layout makes finding that subject easy.

Changes to this manual are issued quarterly.

MANUAL OF THE JUDGE ADVOCATE GENERAL

The *Manual of the Judge Advocate General* (JAG Manual), JAGINST 5800.7, is prepared by the Navy Judge Advocate General and covers legal and judicial matters that apply to members of the Navy and Marine Corps. Among these are instructions about boards of investigation and examining boards—their composition, authority, and procedures.

MANUAL FOR COURTS-MARTIAL

The Uniform Code of Military Justice (UCMJ), approved in May 1950, established a single set of laws for administering justice to all the Armed Forces. The UCMJ was amended in 1968 by the Military Justice Act. Under the authority of this act, the President of the United States issued the *Manual for Courts-Martial, United States, 1969 (Rev.)*.

This manual describes the types of courts-martial and prescribes their membership and procedures. It also gives information on non-judicial punishment, courts-martial review and trials, and limitations on punishments.

The manual was prepared by the Office of the Secretary of Defense. It is a looseleaf volume issued to the Navy through the Office of the Judge Advocate General.

UNIFORM REGULATIONS

United States Navy Uniform Regulations is prepared by the Commander, NMPC and describes the many uniforms for Navy personnel. It lists the uniforms required and articles worn or used together. It gives occasions when the different uniforms should be worn, methods of wearing medals, decorations, ribbons, rating badges, and special markings, and notes on the care of uniforms. The current edition was published in 1975. Changes are issued by NMPC as changes in the uniform occur.

DEPARTMENT OF DEFENSE MILITARY PAY AND ALLOWANCE ENTITLEMENTS MANUAL

The DODPM is issued by the Assistant Secretary of Defense (Comptroller) and contains rules governing entitlements, deductions, and collections on military pay and allowances. This manual contains the pay and allowance entitlements for regular Navy active duty and Naval Reserves serving on active duty with pay. (This manual also includes the pay and allowance rules for the other branches of the Armed Forces.)

Entitlements are the rules that govern military pay. Pay entitlements include basic pay and allowances, incentive pay, special pay, and lump-sum leave and other separation payments.

You should know how to figure the dates and times of beginning and end of this pay and how to figure service for pay purposes. The DODPM shows how to figure pay for periods of authorized and unauthorized absence.

The manual contains helpful tables. These tables simplify technical instructions about pay and allowances entitlements and clear up whether or not an entitlement exists. The tables are numbered to correspond to the text they accompany. For example, Table 1-2-3 is the third in chapter 2 of part 1 of the DODPM.

NAVY AND MARINE CORPS MILITARY PAY PROCEDURES

The MPP Manual is issued by the Office of the Comptroller of the Navy and contains instructions for using the DODPM.

NAVY PAY AND PERSONNEL PROCEDURES MANUAL

The Navy Pay and Personnel Procedures Manual (PAYPERSMAN), NAVSO P3050, is issued jointly by the Office of the Comptroller of the Navy and the Commander, NMPC. It contains pay and personnel procedures for maintaining the Joint Uniform Military Pay System (JUMPS) and the Manpower and Personnel Management Information System (MAPMIS).

The PAYPERSMAN is organized into parts and chapters arranged and numbered in the same order as the DODPM. Part 9 contains detailed information for preparing and distributing documents used in the automated pay and personnel systems. You need to refer to the PAYPERSMAN often when working with JUMPS or MAPMIS.

Eight appendixes follow part 9, and an alphabetical index follows the appendixes. (Instructions about the MAPMIS system are in chapter 11 of this rate training manual. Instructions about JUMPS and the use, preparation, and distribution of OCR documents are in chapter 10 of the *HM 3 & 2* Rate Training Manual.)

ENLISTED TRANSFER MANUAL

The *Enlisted Transfer Manual* (TRANSMAN), NAVPERS 15909, contains instructions for the distribution and assignment of enlisted personnel and supports basic regulations and instructions found in the BUPERSMAN. The purpose of the TRANSMAN is to provide a quick reference of instruction and information material concerning service schools, special programs, and enlisted personnel distribution; it is intended to reduce clerical workload and to promote administrative efficiency.

THE DEPARTMENT OF DEFENSE INFORMATION SECURITY PROGRAM REGULATION

The DODISPR, DOD 5200.1R, is the basic security directive about the safeguarding of classified information. Its provisions apply to all DOD activities.

THE DEPARTMENT OF THE NAVY INFORMATION SECURITY PROGRAM REGULATION

OPNAVINST 5510.1, issued by the Chief of Naval Operations, is to be used in conjunction with DODISPR. This instruction is commonly referred to as the "Security Manual." Its provisions apply to Department of the Navy military and civilian personnel and activities.

The Security Manual has detailed instructions for classifying, marking, and handling classified information and for access to and authorized disclosure of this information.

AWARDS MANUAL

The *Navy and Marine Corps Awards Manual,* SECNAVINST 1650.1, is issued by the Secretary of the Navy to give information concerning decorations, medals, and awards. Information on the manner of wearing them is found in Uniform Regulations.

ADVANCEMENT MANUAL

The *Manual of Advancement,* BUPERSINST 1430.6, is published by NMPC to provide for the administration of the advancement system. It supports and enlarges on the basic policies for advancement found in the BUPERSMAN.

CORRESPONDENCE MANUAL

The *Department of the Navy Correspondence Manual,* SECNAVINST 5216.5, is prepared in the Office of the Chief of Naval Operations (OPNAV) and approved by the Secretary of the Navy. It contains instructions for preparing letters, endorsements, and other forms of naval correspondence. It also contains instructions for assembling correspondence for signature and mailing.

Changes are prepared by OPNAV and signed by SECNAV. The *Correspondence Manual* is discussed further in chapter 10 of this Rate Training Manual.

TELECOMMUNICATIONS USERS MANUAL

The *Telecommunications Users Manual,* NTP 3(C), was developed under the direction of the Commander, Naval Telecommunications Command and is designed for use by elements of the Navy, Marine Corps, and Coast Guard to facilitate uniform and concise procedures for the drafting and preparation of naval messages.

U.S. NAVY PLAIN LANGUAGE ADDRESS DIRECTORY

The *U.S. Navy Plain Language Address Directory,* NTP 3 SUPP-1(B), goes hand in hand with the NTP 3(C). It was developed under the direction of the Commander, Naval Telecommunications Command for the purpose of providing Plain Language Address (PLA), Collective Address Designator (CAD), and Address Indicating Grouping (AIG) assignments to Navy, Marine Corps, and Coast Guard activities, and furnishing other services and DOD activities with Plain Language Addresses.

DEPARTMENT OF THE NAVY STANDARD SUBJECT IDENTIFICATION CODES

The Chief of Naval Operations prepares the *Department of the Navy Standard Subject Identification Codes,* SECNAVINST 5210.11, for the signature of the Secretary of the Navy. It is used in classifying subjects and identifying correspondence directives, blank forms, and reports (assigning report control symbols); setting up filing and retrieval systems; routing of computer messages; and for use with any other documents referred to by subject.

JOINT TRAVEL REGUALTIONS

Joint Travel Regulations (JTR) is issued in two volumes over the signatures of the secretaries of the Army, Navy, Air Force, Transportation, Commerce, and Health and Human Services through the Per Diem, Travel and Transportation Allowance Committee, which operates under DOD. Volume 1 deals with travel of members of the uniformed services, volume 2 deals with travel of DOD civilian personnel. JTR interprets the laws concerning travel, the manner of furnishing transportation, provisions for transportation of dependents, transportation of household goods, reimbursement for travel expenses, and similar information.

NAVY TRAVEL INSTRUCTIONS

U.S. Navy Travel Instructions (NTI) is issued jointly by the Chief of Naval Personnel, the Comptroller of the Navy, and the Commandant of the Marine Corps. It expands on the rules laid down in volume 1 of JTR as they apply to the Navy and Marine Corps. If instructions in NTI and JTR conflict, JTR takes precedence.

NAVY REGISTER

The full title of the Navy Register is *Register of Commissioned and Warrant Officers of the U.S. Navy and Marine Corps and Reserve Officers on Active Duty,* NAVPERS 15018. It is published 1 January of each year by NMPC and issued to all ships and stations. In addition to an alphabetical list of all officers, the Register contains a complete lineal list. The purpose of assigning an officer a lineal number is to establish seniority within the grade and corps.

NAVY OFFICERS CLASSIFICATIONS MANUAL

The *Manual of Navy Officer Classifications* (NOC), NAVPERS 15839, is published by the Commander NMPC and contains classification structures used in identifying officer billet requirements and officer occupational data.

NMPC uses these classifications to identify billet experience and special qualifications of each naval officer. This information is required for personnel administration. NOCs are also used by the CNO to identify qualitative officer requirements in manpower authorizations.

STANDARD NAVY DISTRIBUTION LIST

The *Standard Navy Distribution List* (SNDL) is published by OPNAV to ensure proper addressing and distribution of mail to all activities of the Department of the Navy and to provide a central distribution system for directives and correspondence. The SNDL is published in two parts, each issued separately and designated 'FOR OFFICIAL USE ONLY'.

Part 1 is entitled *Standard Navy Distribution List, Operating Forces of the Navy, Unified and Specified Commands, U.S. Elements of International Commands,* OPNAV P09B3-107.

Part 2 is contained in the publication *Catalog of Naval Shore Activites,* OPNAV P09B3-105

The SNDL is reissued periodically, normally on a quarterly basis, by the Chief of Naval Operations. Changes may be of two types: page changes and serial changes. Serial changes are provided only to commands handling a large volume of mail requiring up-to-date information.

MANUAL OF THE MEDICAL DEPARTMENT

The naval publication of most interest to you is the *Manual of the Medical Department,* commonly referred to as the MANMED. This publication serves as a guide for proper administration of the Medical Department and all of its different functions. You will be responsible for knowing the contents of the MANMED, so study it carefully and learn how to use it. Of particular interest to you are the following chapters:

Chapter 1—The Medical Department

This chapter defines the organization of the Medical Department throughout the Navy and will give you an idea of its complexity and chain of command.

Chapter 9—The Hospital Corps

The information in this chapter is of vital interest to you. You should become familiar with the rating structure and strength of the Hospital Corps and the duties, specialties, responsibilities, and distribution of hospital corpsmen.

Chapter 11—Naval Hospitals

In this chapter you will learn the internal functions of a naval hospital and begin to appreciate the many functions involved in treating the sick and injured.

Chapter 15—Physical Examinations.

Naval personnel must take physical examinations for many reasons. The Navy is very strict about physical qualifications for certain individuals in specific jobs. In chapter 15 you will find the specifications, requirements, and physical standards that must be complied with to qualify for these jobs. Since you, as a senior hospital corpsman, will be involved with physical examinations at one time or another, you should have a good knowledge of this chapter

Chapter 16—Health Record

From the first day of a person's entry into the Federal service to the day he or she is discharged, and even beyond, the health record is of significant medicolegal value to the members concerned, their dependents, and the government. Accuracy is of the utmost importance in recording entries in the health record. It is imperative that you be familiar in all respects with the contents of this chapter.

Chapter 21—Pharmacy Operation and Drug Control

This chapter describes the many phases of pharmacy administration and lists the responsibilities of the different pharmacy personnel. Control of drugs and other substances is discussed at length. It is vital that you understand this chapter.

These chapters are only examples of the information you should know. Needless to say, a solid knowledge of the entire manual will be to your advantage, both in your work and for advancement.

THE NAVY DIRECTIVES ISSUANCE SYSTEM

Due to the pace of our times, the regulations governing the Navy are always changing with new ones replacing, modifying, expanding, or canceling those already in effect. To maintain up-to-date information in the Navy, the Navy Directives Issuance System has been devised. You should be familiar with this system.

By definition, the Navy Directives Issuance System is a standard method used to state policy, procedural, and information releases in the Department of the Navy. A directive does one or more of the following:

a. Regulates or is essential to effective administration
b. Contains policy statements
c. Delegates authority or assigns responsibility
d. Establishes, disestablishes, or changes the organizational structure
e. States or changes a mission, function, or task
f. Initiates or governs a course of action or conduct
g. Contains a procedure, technique, standard, guide, or method of performing a duty, function, or operation
h. Changes, revises, supplements, or cancels another directive. Overall management of the Navy Directives Issuance System is the responsibility of the Chief of Naval Operations.

TYPES OF DIRECTIVES

There are several types of directives, depending on their scope, distribution, and purpose.

All Ships and Stations Directives

Those that apply to all or most of the components of the Department of the Navy and are usually distributed to all parts of the Standard Navy Distribution List. They are issued by departmental components only, not by field activities or commands.

Joint Directive

A directive issued jointly by one originating authority in conjunction with one or more other authorities.

Instruction

A directive containing authority or information having continuing reference value or requiring continuing action. It remains in effect until replaced or canceled by the originator or higher authority. In the Marine Corps this is called an Order.

Notice

A directive of one-time or brief nature with a self-canceling provision that has the same force and effect as an instruction. Usually it will remain in effect for less than 6 months and no longer than 1 year. In the Marine Corps this is called a Bulletin.

Message-Type Directive

A directive transmitted via the Naval Communications System.

Letter-Type Directive

An Instruction or Notice prepared in the Format of a naval letter.

Publication-Type Directive

An Instruction or Notice whose content is best suited to a publication format i.e., parts, chapters, and sections, differing from a manual or publication only by the method of promulgation and identification.

Existing directives are usually changed or modified by the following methods.

PAGE CHANGE—An addition or replacement page for an instruction or Notice, transmitted under cover of a Change Transmittal for insertion by the recipients. It is generally faster and more economical; it provides neater, more legible copy; and it decreases the chance of errors.

PEN CHANGE—A change to an Instruction or Notice, prescribed in a Change Transmittal, to be made by the addressee. Directions state precisely where the change occurs, i.e., page, paragraph, and line number, and any other pertinent information.

REVISION—Instructions are revised periodically as the need arises. The initial Standard Subject Identification Code (SSIC) used to identify the instruction will remain the same and only the subdivision alpha/numeric characters that follow the SSIC will change to identify the revision. The addition of the numeric character following the SSIC shows how many instructions have been promulgated that bear the same SSIC; for example, BUMEDINST 6222.3 indicates that this is the third instruction issued by BUMED that bears the SSIC 6222. An alphabetical character is added to the identification number to indicate the revision of that particular instruction; for example, BUMEDINST 6222.3B indicates that it is the second major revision of that instruction, while a "C" would indicate the third major revision and so on. It is important to note that the alphabetical characters "I" and "O" are never used to indicate major revisions in order to avoid confusion with the numerical characters one and zero.

SUPPLEMENT—A medium formerly used to add information to an existing instruction. It is now prohibited except where necessary to change a joint interservice instruction when the basic instruction cannot readily be changed.

All changes and revisions should be carefully made, according to their accompanying instructions, immediately upon receipt. A manual, directive, or publication in which the required changes have not been made is of no value to the organization—in fact it can be detrimental, since out-dated information is erroneous and misleading.

NAVAL REPORTING REQUIREMENTS

Just as there is a system of communicating down through the chain of command by manuals and directives, there is also a need for input up through the chain of command. This information is required for the many departments to determine logistic support, administrative policy, and overall management of the Navy.

To gather this input, a system of reporting is required. Each unit in the Navy is directed to submit certain information at specific periods to higher authority in the Navy.

TYPES OF REPORTS

Department of Defense Reports and Forms

Since in some situations the Armed Forces and other organizations in the Department of Defense have a common purpose of reporting, the reports and forms have been standardized. These forms are put forth by the Bureau of the Budget to make the exchange of information throughout the Federal Government easier. They are identified by the "DD" (Department of Defense) or "SF" (Standard Form). An example of the former is DD-1289—DOD Prescription—used by all Federal agencies that write prescriptions; an example of the latter is the SF-88—Report of Medical Examination—used by all Federal agencies that require physical examinations on their personnel.

Navy Department Forms

Of primary interest to hospital corpsman are the following types of reports and forms:

NAVPERS Forms—These reports and forms are designed to deal with personnel reporting. For instance, the NAVPERS 1070/600 series deal exclusively with the Navy service record of an individual.

NAVMED Forms—These reports and forms belong to the Medical Department. A list of these forms and their descriptions and purposes can be found in chapter 23 of the Manual of the Medical Department.

NAVSUP Forms—These forms are devised for the naval supply system and will be used for ordering supplies or equipment within the Medical Department.

NAVCOMPT Forms—These forms are devised for the financial system and will be used for reporting happenings that affect a person's pay.

Reports and forms are also categorized by frequency of submission, e.g., weekly, monthly, quarterly, annually, or as needed (situationally).

Chapter 23 of the Manual of the Medical Department deals exclusively with those forms and reports relative to the Medical Department. It lists them according to category, gives information on submission, and specifies the number of copies required.

RECORDS RETIREMENT

Section 506 of the Federal Records Act requires an active, continuing program for economical and efficient management of records. The program provides for effective controls over the creation, maintenance, and use of records in conducting business; the retirement of noncurrent records; and the destruction of nonessential records. Chapter 6 of SECNAVINST P5212.5 series, Disposal of Navy and Marine Corps Records, contains all the regulations on the disposition of records relative to the Medical Department.

In summary, it is to your advantage to have a good knowledge of the many manuals listed in this chapter. The ability to find information or to substantiate and verify an administrative procedure is the mark of an efficient senior hospital corpsman.

A good knowledge of the Navy Directives Issuance System is essential for effective medical administration and keeps you abreast of new developments.

Neat, accurate, and timely submission of required reports and forms will earn you an outstanding reputation.

CHAPTER 10

NAVY CORRESPONDENCE AND CLASSIFIED INFORMATION

To naval personnel, the term "official correspondence" should mean all recorded communications sent or received by a person in the Navy Department in the execution of his or her duties.

CORRESPONDENCE

To establish uniformity in the preparation of correspondence, the Secretary of the Navy has issued the *Navy Correspondence Manual* (SECNAVINST 5216.5 series). This manual is directed to typists, stenographers, and writers who prepare correspondence in the Navy.

The *Navy Correspondence Manual* standardizes many correspondence practices and allows for certain optional practices by an activity. All activities should supplement this manual with instructions for items such as number of copies, originator codes, use of file or serial numbers, dating procedures, correct form of signatures for various officials, and method of assembling for signature and release.

Selecting the proper type of communication for transmitting information to others is of special importance in many operations. Select the most effective medium for conveying needed information. When practicable, the transaction of official business is facilitated by maximum use of personal contact and local or Autovon telephone rather than by correspondence. Messages or toll telephone calls will be used only when regular mail or airmail will not suffice.

Types of Correspondence and Use of Each

1. A NAVAL LETTER is used by all activities of the Department of the Navy as a formal means of interdepartmental communication. It may be used also to address other agencies, either governmental or nongovernmental, that are familiar with the form.

2. AN ENDORSEMENT is used to forward, with appropriate recommendation, comment, or information, correspondence that is transmitted through one or more addressees before it reaches its destination. The contents of a prior endorsement also may be the subject of comment. An endorsement is most effectively used for transmission of correspondence through the chain of command. It becomes part of the basic letter to which it is appended and is not at any time detached from the basic letter.

3. A JOINT LETTER is used when officials of two or more activities need to issue a letter concerning a particular subject or administrative problem common to the activities.

4. A MULTIPLE-ADDRESS LETTER is used to address two or more activities that are individually identified or addressed as a group. It shall not be used for material belonging in the directive system.

5. A NAVY DIRECTIVE is issued in the form of an Instruction or Notice to prescribe or establish policy, organization, conduct, methods, procedure, etc.

6. A MESSAGE is used only when information is of an urgent nature and must be transmitted rapidly by electronic means.

7. A SPEEDLETTER is used for urgent communication that does not require electrical transmission.

8. A MEMORANDUM is used for informal communications within and between headquarters components of the Navy Department, between fleet and force commanders and units of command under their jurisdiction, and within a field activity.

9. A BUSINESS-FORM LETTER is used for correspondence addressed to persons or agencies outside the Department of Defense who are not familiar with the naval form of correspondence.

Determining The Components of A Communication

Since the naval letter sets the pattern for other types of correspondence within the Navy, the following instructions are based primarily on its form (Fig 10-1).

1. The type of stationery is determined by the originator. If printed letterhead stationary is not available, the letterhead should be typed. Bond paper for originals and manifold sheets for copies are the usual choices. The color and distribution of manifold copies are at the discretion of the originator; however, the following is standard practice:

Official Files—one green manifold or designated reproduced copy.

"Via" addressees—one white manifold copy for each addressee.

"Copy to" addressees—one white manifold copy for each addressee.

2. The number of copies required is determined by the subject of the letter, the number of addressees, and filing practices.

3. Identification symbols are determined by each activity.

a. An originator's code, formed according to local instructions, must appear on all outgoing correspondence, except as noted in the Correspondence Manual.

b. A file number is not required on correspondence but may be used. If used, it should represent the actual file location of the correspondence and is obtained from the Department of the Navy Standard Subject Identification Codes, SECNAVINST 5210.11 series.

c. Serial numbers, if used, are preceded by the abbreviation "Ser", with no punctuation; one space separates the abbreviation and the number which follows. Classified correspondence shall be serially numbered for each calendar year, and the serial numbers of confidential correspondence preceded by the letter "C", secret by the letter "S", and top secret by the letter "T".

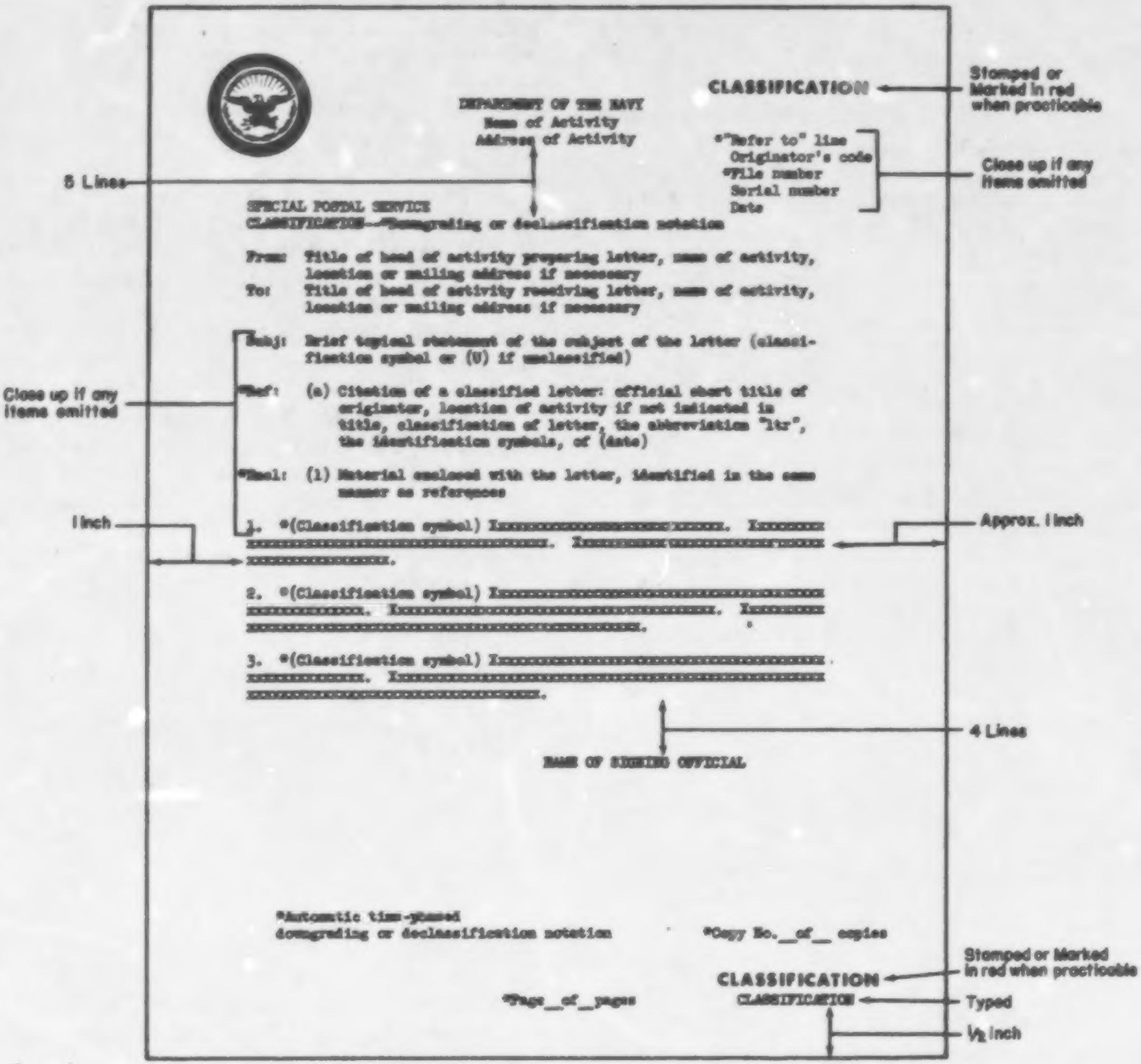
4. Dates shall appear as the day, month, and year. The day is always shown in numerals, the month may be spelled out or abbreviated, and the year is expressed by the four digits of the calendar year. Correspondence should be dated on the date on which it is signed.

5. The special postal service designation AIRMAIL, REGISTERED MAIL, CERTIFIED MAIL, or SPECIAL DELIVERY is typed in capital letters or stamped at the left margin on the fourth line below the last line of the address in the letterhead.

6. The security classification designation TOP SECRET, SECRET, or CONFIDENTIAL is typed in capital letters at the left margin, one line below the special postal service, if any, or on the fifth line below the last line of the address in the letterhead, and also 1/2 inch from the bottom of the page, ending flush with the right margin (See Fig. 10-1).

a. When a letter is classified because it transmits classified material and thus can be downgraded or unclassified upon the removal of

Asterisks indicate items that may not be required



CLASSIFICATION

DEPARTMENT OF THE NAVY
Name of Activity
Address of Activity

*"Refer to" line
Originator's code
*File number
Serial number
Date

SPECIAL POSTAL SERVICE
CLASSIFICATION—*Downgrading or declassification notation

From: Title of head of activity preparing letter, name of activity, location or mailing address if necessary
To: Title of head of activity receiving letter, name of activity, location or mailing address if necessary

Subj: Brief topical statement of the subject of the letter (classification symbol or (U) if unclassified)

*Ref: (a) Citation of a classified letter: official short title of originator, location of activity if not indicated in title, classification of letter, the abbreviation "ltr", the identification symbols, of (date)

*Encl: (1) Material enclosed with the letter, identified in the same manner as references

1. *(Classification symbol) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxx. Xxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxx.

2. *(Classification symbol) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxx. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx. Xxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

3. *(Classification symbol) Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxx. Xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx.

NAME OF SIGNING OFFICIAL

*Automatic time-phased
downgrading or declassification notation

*Copy No.__of__ copies

CLASSIFICATION

*Page__of__pages

CLASSIFICATION

Stamped or Marked in red when practicable
Close up if any items omitted
5 Lines
Close up if any items omitted
1 inch
Approx. 1 inch
4 Lines
Stamped or Marked in red when practicable
Typed
½ inch

95.15

Figure 10-1.—Format of Classified Naval Letter.

this material, a statement to this effect is typed or stamped after the security classification at the left margin at the top of each page. These markings will be in accordance with DOD Regulation 5200.1R of 1 June 1972 and any Navy implementation thereof, when issued.

b. In addition to the typed classification, the classification shall be immediately stamped or marked at the upper right corner and the lower right corner in red capital letters larger than the type in the text.

c. The second and succeeding pages of a letter are also marked according to their individual content. The top marking is flush with the left margin and is typed in the same place as on the first page. In addition, stamped classification markings are placed above the identifying symbols and just above the typed classification at the bottom of the page.

7. The "from" line identifies, by title, the official in charge of the component of the Department of the Navy originating the letter. This is the official to whom a reply is directed. The name and location of the activity originating the letter must be included.

8. The "to" line identifies the addressee by title and not by name when correspondence is directed to an incumbent of an office and is intended for that office. The title is written in the same manner as in the "from" line. Sufficient additional information should be given to ensure that the letter is correctly and readily delivered. Normally, the word "Attention" is not used in the "to" line.

9. The "via" line is used when there is more than one addressee or when the correspondence is to be forwarded through the chain of command. When there is more than one "via" addressee, each is numbered with Arabic numerals enclosed in parentheses. The "via" line, if used, is placed on the line below the "to" line.

10. The "subject" line—The abbreviation "subj" is used to state the subject briefly, specifically, and in topic form.

11. The "reference" line—The abbreviation "ref," without the "s" even though there is more than one reference, is used as the caption when previously prepared material is cited. References are listed in the order in which they are mentioned in the text.

12. The "enclosure" line—The abbreviation "encl," without the "s" even though there is more than one enclosure, is used to introduce a listing of material forwarded with the letter.

13. A salutation is used only on a business-form letter.

14. Paragraphs are single spaced and numbered flush at the left margin with Arabic numerals followed by a period.

15. A complimentary close is used only on a business-form letter.

16. The signature information is typed or stamped in block style, four lines below the last line of the text, beginning at the center of the page. All names are typed in capital letters, and neither the grade nor, as a rule, the functional title of the signing official is shown in the signature.

17. The "copy to" line is written in full and followed by a colon. The "copy to" is placed on the second line below the last line of the signature information, flush with the left margin. Officials receiving copies are listed by abbreviated titles on the line below the "copy to" notation.

18. The first page of a letter is not numbered unless classified "Top Secret". Each page of a Top Secret letter is numbered as follows: Page__of__pages. On all other correspondence, second and succeeding pages are numbered consecutively with Arabic numerals, beginning with 2, centered 1/2 inch from the bottom of the page. The numerals are typed without parentheses or dashes.

19. The drafter's activity, his or her initials and surname, the typist's initials, and the date of preparation are typed on file copies of all correspondence. The correspondence file that accompanies the letter to be signed is arranged according to activity practices.

Routing of Correspondence

Routing of correspondence through channels means routing of a communication through those commands, activities, or offices expected to exercise control, to take action, or to be concerned.

Official correspondence is forwarded via the chain of command except as otherwise prescribed by competent authority.

Officers in the chain of command shall forward official correspondence with an appropriate endorsement as soon as possible.

When there is insufficient time to route a communication through channels and still meet a deadline date, a communication may be sent directly to the ultimate addressee. A copy of the action taken is forwarded concurrently to each command, activity, or office which, under normal circumstances, would have been an intermediate addressee.

CLASSIFIED INFORMATION

The security of the United States in general and of naval operations in particular depends in part upon the success attained in safeguarding classified information. It is of paramount importance that all who engage in administering security preserve a balanced and common sense outlook on the subject. The ideal to be sought is the indoctrination of all personnel to the point that they automatically exercise proper discretion in the discharge of their duties and do not think of security of information as something separate and apart from their daily job. In this way, security of classified information becomes a natural element of every task and not an additional burden. The attainment of the desired objective requires sound direction from above and full alertness and cooperation on the part of all subordinates.

Definitions

ACCESS. The ability and opportunity to obtain knowledge or possession of classified information. An individual does not have access to classified information merely by being in a place where such information is kept if the security measures prevent him or her from gaining knowledge or possession of such classified information.

CLASSIFIED INFORMATION. Official information that requires protection in the interest of national defense and that is classified for such purposes by a responsible classifying authority.

CLASSIFIED MATTER. The terms "classified information," "classified material," and "classified matter" are sometimes used synonymously in various regulatory publications. The instant differentiation of these terms is not intended to interfere with that broader meaning wherever employed.

CLASSIFY. The procedure whereby (1) a decision is made to place information within a classification category after it is first determined that the information requires protection in the interest of national security, (2) the classified information is marked accordingly, and (3) interested commands are notified as to the assigned classification.

CLEARANCE. An administrative determination by competent authority that an individual is eligible, from a security standpoint, for access to classified information of a specified category.

COMPETENT AUTHORITY—COMMANDING OFFICER. In this case the terms "competent authority" and "commanding officer" are synonymous. These terms are intended to include "commander," "officer-in charge," "naval representative," "director," "inspector," and any other title assigned to an individual, military or civilian who, through command status, position, or administrative jurisdiction, is qualified to assume responsibility and to render a decision with regard to a specific question under consideration.

COMPROMISE. A violation of security that results from an unauthorized person obtaining knowledge of classified information. As used in this case, the term "unauthorized person" means any person not authorized to have access to classified information.

DECLASSIFY. To remove the classification from classified information. Notification to holders of this information is part of the process.

DISCLOSURE. An officially authorized release or dissemination by competent authority whereby the information is furnished to a specific individual, group, or activity.

DOCUMENT. Any recorded information, regardless of its physical form or characteristics, and including but not limited to the following:

1. Written material, whether handwritten, printed, or typed
2. All painted, drawn, or engraved material
3. All sound or voice recordings
4. All printed photographs, exposed or printed film, and still or motion pictures
5. Data processing cards and tapes
6. All reproductions of the foregoing by whatever process reproduced

DOWNGRADING. The act of lowering the classification assigned to information while retaining it within a category of classified information.

HANDLING. The preparation, processing, transmission, and custody of classified information.

INFORMATION. Knowledge that can be transmitted by any means.

MARKING. The physical act of indicating on classified material the assigned classification, changes in classification, and any special limitations on the use thereof.

NEED TO KNOW. The term given to the requirement that the dissemination of classified information can be limited strictly to those persons whose official military or other governmental duties require knowledge or possession thereof. Responsibility for determining whether a person's duties require possession or access to classified information and whether he or she is authorized to receive it rests upon each individual who has possession, knowledge, or command control of the information involved and not upon the prospective recipient. This principle is applicable whether the prospective recipient is an individual, a command, a defense contractor, another Federal agency, or a foreign government. A "need to know" is established when (1) the disclosure is necessary in the interest of national defense, (2) there clearly appears from the position, status, duties, and responsibilities of the applicant a legitimate requirement that he or she must have access to the classified information to carry out assigned duties and responsibilities, (3) there is no other equal or ready source of the same classified information available to the individual, and (4) the applicant is or can be appropriately cleared for access to the type of classified information involved and is capable both physically and mentally of providing the degree of protection that particular information requires.

ORIGINATOR. The command by whose authority an item of information is created and disseminated.

SECURITY. The protected condition of classified information that prevents unauthorized persons from obtaining information of direct or indirect military value. This condition results from the establishment and maintenance of protective measures that ensure a state of inviolability from hostile acts or influences.

STOWAGE. The manner in which classified material is protected by physical and/or mechanical means.

TRANSMISSION. Movement involving the actual transfer of custody and responsibility for a document or other classified material from one command or section of a command to another command or another authorized addressee. It does not apply to personnel carrying classified material for their own legitimate use to be retained by them and returned to their own command files.

UPGRADING. The act of assigning a higher classification to information than that previously assigned. Notification to holders of the information is part of the process.

Classification Categories

TOP SECRET. Limited to defense information or material requiring the highest degree of protection. This classification shall be applied only to that information or material the defense aspect of which is paramount, and unauthorized disclosure of which could result in exceptionally grave damage to national security.

SECRET. Limited to defense information or material the unauthorized disclosure of which could result in serious damage to national security.

CONFIDENTIAL. Limited to defense information or material the unauthorized disclosure of which could result in damage to or be prejudicial to national security.

Documents may have designations in addition to Top Secret, Secret, and Confidential. These include:

Restricted Data and Formerly Restricted Data—nuclear energy information
JCS (Joint Chiefs of Staff) papers
NSC (National Security Council) papers
NATO (North Atlantic Treaty Organization) papers

Specific directives should be consulted in these cases.

Designators assigned for purposes of administrative control such as "For Official Use Only" should not be confused with security classifications. They are not security classifications and should not be handled as such.

All persons who handle classified information must have proper clearance. This clearance indicates that the person is considered loyal to the United States and is familiar with the procedures prescribed by the Department of the Navy Information Security Program Regulation (OPNAVINST 5510.1 series).

Standard Subject Identification Codes

The Department of the Navy Standard Subject Identification Codes, SECNAVINST P5210.11 series, is prescribed for use in classifying general correspondence and related papers (for filing), numbering instructions and notices, and assigning report symbols. It is recommended for use in classifying forms and other documents to which reference is made by the subject.

Section I is the list of Standard Subject Identification Codes.
Section II is the list of Name-Title Subject Identification Codes.
Section III is the alphabetical guide to Standard Subject Identification Codes.

SECNAVINST 5211.3 series contains instructions for classifying and filing records by subjects using Standard Subject Identification Codes.

Major Subject Groups

There are 14 major subject groups in the standard table of subject classification numbers. Each of these major subject groups is designated by a four or five digit numeric code. These major subject groups are:

1000 Series MILITARY PERSONNEL. Includes subjects relating solely to the administration of military personnel. (Civilian personnel subjects are included in the 12000 series. General personnel subjects relating to both civilian and military personnel are included in the 5000 series.)

2000 Series TELECOMMUNICATIONS. This series includes subjects relating to general communication matters and to communication systems and equipment.

3000 Series OPERATIONS AND READINESS. Includes subjects relating to such matters as operational plans, fleet operations, operational training and readiness, warfare techniques, operational intelligence, and operational research and development.

4000 Series LOGISTICS. Includes subjects relating to logistical support of the Navy and Marine Corps, including procurement, supply control, redistribution and disposal, travel and transportation, maintenance, construction and conversion, production and mobilization planning, and foreign military assistance.

5000 Series GENERAL ADMINISTRATION AND MANAGEMENT. Includes subjects relating to the administration, organization, and management of the Department of the Navy, including general personnel matters (concerning both military and civilian personnel), security, external relations, law and legal matters, office services, and publications and printing matters.

6000 Series MEDICINE AND DENTISTRY. Includes subjects relating to medical and dental matters, such as physical fitness, general medicine, special or preventive medicine, and medical equipment and supplies.

7000 Series FINANCIAL MANAGEMENT. Includes subjects relating to the financial administration of the Department of the Navy, including budgeting, disbursing, accounting, auditing, industrial and other special financing matters, and statistical reporting.

8000 Series ORDNANCE MATERIAL. Includes subjects relating to all types of ordnance material, including ammunition and explosives, guided missiles, underwater ordnance materials, and miscellaneous ordnance materials.

9000 Series SHIP DESIGN AND MATERIALS. Includes subjects relating to such matters as the design, characteristics, and readiness of ships, and to ship materials and equipment.

10000 Series GENERAL MATERIAL. Includes subjects relating to general categories of materials not included in the specialized material groups. It includes photographic equipment and accessories, general machinery and tools, personnel (materials), and miscellaneous categories.

11000 Series FACILITIES AND ACTIVITIES ASHORE. Includes subjects relating to ashore structures and facilities, fleet facilities, transportation facilities, utilities and services, and other similar subjects.

12000 Series CIVILIAN PERSONNEL. Includes subjects relating solely to the administration of civilian personnel. (Military personnel subjects are included in the 1000 series. General personnel subjects relating to both military and civilian personnel are included in the 5000 series).

13000 Series METEOROLOGICAL AND ASTRONAUTICAL MATERIAL. Includes subjects relating to aeronautical and astronautical materials, including parts, accessories, instruments, special devices, armament, aerological equipment, weapons systems, types of aircraft, and astronautic vehicles.

16000 Series COAST GUARD MISSIONS. Includes subjects relating solely to the administration and mission of the Coast Guard.

Subdivisions

The 14 major subject groups are divided into primary, secondary, and tertiary breakdowns. Activities may be further subdivided by the addition of a slant (/) and arbitrary symbols.

PRIMARY SUBJECTS are designated by the last three digits (the hundreds group).

SECONDARY SUBJECTS are subdivisions of primary subjects and are designated by the last two digits (the tens group).

TERTIARY SUBJECTS are subdivisions of the secondary subjects and are designated by the last digit.

Examples

Major 5000 General Administration and Management
Primary 5200 Management Programs and Techniques
Secondary 5210 Records Management
Tertiary 5211 Filing, Maintenance, Protection, and Retrieval Systems

Envelopes and Mailing

Official mail consists of communications, publications, and other materials transmitted through the postal system that relate exclusively to the business of the Department of the Navy. Official mail is transmitted in a "Postage and Fees Paid" envelope (indicia) or in a plain envelope or wrapper with an indicia label. Official mail should never contain unofficial material.

Zip Code

The ZIP code system was introduced into the U.S. postal system on 1 July 1963. The ZIP code is a five-digit, numeric-code system that identifies each geographic area, post office, and delivery unit in the country. The ZIP code number should appear on the last line of both the forwarding and return address on all envelopes.

Special Mailing Instructions

a. General. The postal classification and type of mail service requested determine the speed, security, control, and cost of mailing. Postcards and conventional letter-size sealed envelopes automatically receive first-class service without special markings.

b. First-Class Mail. First-Class mail (including special services) is given priority handling over lower classes of mail throughout the U.S. postal system. Transportation within the domestic system is by surface means, except that "space available" airmail is provided when feasible.

c. Airmail. Mail marked "Airmail" is accorded first priority handling in the postal service and, in addition, is transported by airmail in both the domestic and overseas postal systems.

d. Special Delivery Mail. Special delivery service is available on all classes of mail. "Special Delivery" is not provided by the Postmaster, Washington, D.C., to agencies of the Federal Government.

e. Registered Mail. Use of registered mail will be kept to a minimum. Only matters of significant intrinsic value, or that which is required by regulation to be transmitted by registered mail, will be registered.

f. Certified Mail. The use of certified mail is limited to first-class mailing of material requiring restricted delivery or proof of delivery.

g. If the letter requires special mail service, type the mailing instructions in capital letters, two lines above the address and aligned with it.

CHAPTER 11

PERSONNEL RECORDS AND ACCOUNTING

Effective personnel management requires accurate and timely personnel recording and accounting systems. Throughout the Navy, personnel records are of utmost importance both to the command and to the individual concerned. Effective and rapid personnel accounting can be a tremendous morale factor within the command, whereas haphazard methods, which may result in loss or destruction of vital records, can have a bad effect on individuals and dependents.

In the Medical Department proper records administration reaches even greater importance. We are charged with administering not only routine personnel records, but also clinical records, which may affect the rights and benefits of patients and their dependents years beyond retirement or discharge.

USE AND MAINTENANCE OF REFERENCE MATERIAL

The rules and regulations that ensure uniform methods of personnel administration throughout the Navy are contained in directives and various manuals. To function effectively you must become familiar with these and have a working knowledge of them. Conversely, outdated, poorly maintained, or obsolete directives and manuals are not only useless, but also detrimental, since erroneous information will do more harm than good. Refer to the chapter entitled "Manuals, Directives, and Reports" for instructions on making changes to directives; follow the directions diligently to ensure that all information is up-to-date.

The following factors are of major significance in effective personnel management and accounting in the Navy.

DAY-TO-DAY PERSONNEL REPORTING

The personnel picture within a command is in a state of constant flux—personnel are reporting aboard, being detached, or failing to report for duty either due to illness, desertion, or other unpredictable factors. Changes in status, such as promotions, demotions, marriages, or retirements, occur constantly, affecting the individual and the command. They must be taken into account and recorded properly.

THE MANPOWER AND PERSONNEL MANAGEMENT INFORMATION SYSTEM

With the ongoing need for current and reliable information on its officers and enlisted personnel, the Navy has established the Manpower and Personnel Management Information System (MAPMIS) to help naval authorities maintain and manipulate data on naval activities and personnel procurement, education, training, promotion, distribution, discipline, retirement, welfare, morale, awards, decorations, and security.

MAPMIS is a computerized information system. With the help of automatic data processing machines, personnel information can be gathered, processed, retrieved, and disseminated with a speed and accuracy never before possible.

The information stored helps the Navy determine assignments, current and projected manpower needs, and budget estimates which are sent to Congress. The MAPMIS Division in the Naval Military Personnel Command (NMPC) administers MAPMIS. NMPC is supported in its MAPMIS functions by automatic data processing field units. The unit you will have the most contact with is the Enlisted Personnel Management Center (EPMAC). EPMAC maintains magnetic tape or punched card records on billets, personnel, and assigned naval activities, submits data to NMPC, and provides required information to commands of the operating forces and other components of the Navy.

The Personnel Diary

The personnel diary is a chronological record of personnel attached to a naval activity. Its purpose is to provide MAPMIS with current accounting information in the preparation of management reports throughtout the Navy. Officer and enlisted personnel are managed as separate accounts and require separate diaries. Feedback to MAPMIS is in the form of the Officer Distribution Control Report for the officer account and the Enlisted Distribution and Verification Report for the enlisted account.

The diary shall be prepared by naval activities when directed by EPMAC. Make an original personnel diary (NAVPERS 1070/75) and at least two carbon copies.

The original diary is microfilmed at EPMAC to provide a permanent record of personnel changes. It must be typed legibly with a black ribbon and signed in black ink.

The first carbon copy is used by EPMAC to establish and maintain local records and to forward personnel data to NMPC via computer tape for inclusion in MAPMIS.

The second carbon copy is retained by the activity as a permanent chronological record of personnel changes.

Other carbon copies are prepared as required for local authorities.

Diary Preparation

The standard diary consists of three parts: the heading, the body, and the certification.

The heading contains the identification of your activity. The diary heading will be recorded daily except when there are no changes for a particular date or dates.

The body contains regular entries and memorandum entries. Regular entries include gains, losses, and miscellaneous changes in personnel. Memorandum entries consist of sailing entries, passenger lists, and other entries that affect the activity as a whole.

The first line of a regular entry identifies the individual; the following line or lines are change description lines. The first line of a memorandum entry describes the action; the following line or lines describe the individual or individuals.

The certification consists of a signed statement of approval attesting to the accuracy and completeness of the personnel diary. Additionally, at the end of the accounting period the activity certifies the receipt and verification of the Officer Distribution Control Report or the Enlisted Distribution and Verification Report on the appropriate diary (officer or enlisted). Approval entries will be signed by the commanding officer or a designated representative.

The schedule for submitting the personnel diary is as follows:

Original diaries will be forwarded to EPMAC no later than the next normal workday following the events being reported, as follows:

1. at the end of each month, reflecting all changes occurring up to and including the last day of the month;
2. when an activity is decommissioned or disestablished and the last member transferred.

The first carbon copy will be forwarded to EPMAC no later than the next normal workday following the events being reported, as follows:

1. upon inauguration;
2. daily when changes occur, covering the period 0001-2400 hours;
3. as of 2400 hours the last day of each month, whether or not changes have occurred;
4. immediately prior to sailing, whether or not changes have occurred;
5. when an activity is decommissioned or disestablished.

Enlisted Distribution and Verification Report

The Enlisted Distribution and Verification Report (EDVR) is a monthly statement of the activity's enlisted personnel account, reflecting all individual assignments, and serves as:

1. A rate and NEC summary of the current and future manning status of the activity
2. A common reference point in any discussion of manning status between the manning or detailing control authorities and the activity
3. A statement of account for verification by the activity
4. A permanent historical record in NMPC of an activity's personnel account for statistical uses and overall Navy personnel manning

The EDVR is distributed monthly by EPMAC. It is organized into eight sections:

1. Sections 1 through 3 contain information on members that has been extracted from the activity account and requires special attention and/or action by the activity. They are consolidated lists of members who are expected to report to the activity, be detached from the activity, or are in a duty or a temporary duty status.
2. Section 4 contains the total personnel account of the activity, including those members reflected in sections 1 through 3. It is a listing of total personnel on board.
3. Sections 5 through 8 contain statistical and authorized billet informtion. They are summaries for the review of the head of the activity in its planning.

All sections are designed to assist the activity in its responsibility for maintaining accurate personnel accounts and providing personnel information to the head of the activity. Section 3 also contains an alphabetic listing of all members in the activity's personnel account regardless of their status.

Individual detailing (ordering personnel to and from an activity) and manning decisions are, for the most part, based on information contained in the EDVR account; therefore, it is extremely important that each activity keep its account up-to-date and accurate by submitting changes as they occur and reporting errors as they are found.

When you receive your copy of the current EDVR at your command, you must verify the accuracy of the report and make corrections, as necessary, on your personnel diary.

For additional and more detailed information concerning the EDVR, consult BUPERSINST 1080.51 series.

Officer Distribution Control Report

The Officer Distribution Control Report (ODCR) is prepared by NMPC for each naval activity with officer billet authorizations. The officer billet and assignment information contained in the ODCR represent the computer data bank input by the Chief of Naval Operations; the Commander, Naval Military Personnel Command; the Commanding Officer, Navy Finance Center, Cleveland; the Commander, Naval Safety Center, Norfolk; your activity; and the individual officers attached to your activity.

The ODCR is prepared monthly at NMPC as a statement of account for pertinent Navy activities. It provides the activities with a routine system for verifying information contained in the NMPC officer personnel data bank, and it provides NMPC with information needed to determine and evaluate officer personnel requirements.

The ODCR is designed to reflect four specific types of information:

1. Activity identification data and related items
2. Billets authorized and related items
3. Individual officer personnel data
4. Phase data pending change to activity name, billets authorized, or Manpower Requirements Plan Codes

Commanding officers will ensure that the OCDRs are validated monthly upon receipt and that any required changes are made. If data concerning an officer are incorrect on the ODCR, the officer's individual automated record in NMPC is also in error. To avoid any personnel action being taken on the basis of erroneous information, all activities must complete verification and submit corrections as soon as possible after receipt of the ODCR.

For additional and more complete information concerning the ODCR, consult BUPERSINST 1301.38 series.

THE SERVICE RECORD

Of great importance to the individual in the naval service and an important part of the Navy's personnel accounting and reporting system is the service record.

A service record is a chronological record of events as they apply to the individual during his or her naval service. This discussion will consider the records maintained by the activity. You should remember that similar and additional records are maintained in NMPC.

Complete instructions for maintaining the service record may be found in BUPERSMAN, PAYPERSMAN, and Navy directives.

The following descriptions are intended for illustrative purposes only. Make sure you use the references when working with service records, as requirements for their upkeep and maintenance frequently change.

OFFICER SERVICE RECORD

The Officer Service Record (NAVPERS 1070/66) consists of a file folder bearing the name, rank, and SSN of the individual officer. The left and right sides inside the folder are fitted with fasteners to facilitate filing pages. Adverse information shall not be filed in the service record, nor shall the service record be used as a depository for wills and other personal documents. Except as otherwise specifically prescribed, adverse matter shall be retained in command files for ready reference and subsequently disposed of in accordance with disposal schedules for such files.

The right side of the service record is reserved for documents affecting the utilization and assignment of the officer concerned, including:

1. Copy of the Officer Qualifications Questionnaire, NAVPERS 1210/5. This is the basic document from which information concerning an officer's skills and experience, both military and civilian, is obtained and recorded.
2. Officer Biography Sheet, NAVPERS 5720/1. This is a listing of personal information that may be released to the press.
3. Original of the Training School Record, NAVPERS 318, for officers commissioned prior to March 1965
4. Copies of Annual Qualifications Questionnaire—Inactive Duty Reserve Officer, NAVPERS 1210/2. This form lists the additional experience attained since the last report.
5. Copy of the latest Officer History Card, NAVPERS 1070/68, and Officer Preference and Personal Information Card, NAVPERS 1301/1
6. Copy of the latest Officer Data Card, NAVPERS 1301/6
7. Copy of Statement of Personal History, DD Form 398
8. Letters of designation or revocation of special qualifications
9. Any official correspondence affecting the utilization and assignment of an officer

The left side of the service record is reserved for official correspondence and documents of a permanent historical nature relating to the officer's present tour of active duty and official correspondence relating to the officer's history at the present duty station, including the following:

1. Leave Authorization (Officer and Enlisted), NAVCOMPT 3065
2. Copy of Acceptance and Oath of Office, NAVPERS 1000/21 or 1000/22, for present grade
3. Copy of Statement of Service, NAVPERS 1070/26
4. Signed copy of Dependency Application/Record of Emergency Data, NAVPERS 1070/602. Attach original of the latest SGLI Election, VA Form 29-8286, to NAVPERS 1070/602
5. Documents pertaining to completion of security investigations and issuance of security clearances:
    a. Certificate of Personal Security Clearance, OPNAV Form 5521-429
    b. Any Certification of Completed Security Investigation, NAVPERS 5521/3 or 2716; National Agency Check Request, DD Form 1584;

6. Copies of official correspondence originated at the present command and endorsements or copies of replies thereto

7. Orders or copies thereof, with all endorsements relating to the officer's tour at the present command

8. Copies of Correspondence Course Completion letters

9. Signed copy of the Code of Conduct letter

10. Application for Armed Forces Identification Card, NAVPERS 5512/1

11. Latest photograph

12. Copy of the Armed Forces of the United States Report of Transfer or Discharge, DD Form 214 or 214N

13. Official correspondence relative to assignment, cancellation, or termination in the Naval Reserve Program

ENLISTED SERVICE RECORD

The Enlisted Service Record, NAVPERS 1070/600 is the official history of an enlisted member's service in the Navy. It consists of a folder with pages 1 through 15 filed on the right side. The folder bears the name, SSN, and branch of service of the member. Adverse matter shall not be placed in the enlisted service record or forwarded to NMPC for inclusion in an enlisted member's official personnel record without first affording the member an opportunity to submit a written statement in rebuttal. If the member does not wish to make a rebuttal, he or she will state so in writing.

PAGE 1—Enlistment or Reenlistment Agreement—Armed Forces of the United States, DD Form 4. This is a four-part form and serves as the basic document that establishes a legal relationship between the member and the Government. For immediate reenlistment use NAVPERS 1070/601, Immediate Reenlistment Contract.

PAGE 1A—Agreement to Extend Enlistment, NAVPERS 1070/621, is the legal agreement between an enlisted member and the Government to extend the member's current enlistment for a specified period.

PAGE 1B—Assignment to and Extension of Active Duty, NAVPERS 1070/622, provides a record of the assignment of a member on inactive duty to active duty and an agreement to extend a tour of active duty for a member of the Naval Reserve, Fleet Reserve, or a retired member on active duty.

PAGE 2—Dependency Application/Record of Emergency Data, NAVPERS 1070/602, is a multipurpose form used for both officers and enlisted members. Part I serves as an application for dependency allowances. Part II provides an immediately accessible, up-to-date record of emergency data for casualty reporting and notification to the next of kin. Part II is the official document used by the Navy to determine persons to be notified in case of emergency or death; persons to receive the death gratuity when no spouse or child exists; persons to receive allotment if member is missing; persons to receive unpaid pay and allowances; and commercial insurance companies to be notified in case of death.

PAGE 3—Enlisted Classification Record, NAVPERS 1070/603, contains pertinent information relative to a member's aptitude test scores, civilian education and training, personal interests, and civilian experience.

PAGE 4—Navy Occupation/Training and Awards History, NAVPERS 1070/604, provides a complete chronological record of enlisted classification codes and designators assigned, changed, or revoked; Navy service schools attended; Navy training courses, performance tests, personnel qualification standards, and leadership examinations completed; advancements, reductions, changes in rate or rating, GED tests, and off-duty study courses completed; and awards and decorations received.

PAGE 5—History of Assignments, NAVPERS 1070/605, is used to record the activities to which the member has been attached. Extensions, bonus pay, sea and shore duty commencement dates, etc., are recorded on this page.

PAGE 6—Record of Unauthorized Absence, NAVPERS 1070/606, is used to record periods of unauthorized absence in excess of 24 hours.

PAGE 7—Court Memorandum, NAVPERS 1070/607, is used to record court-martial actions when a guilty finding is made by the court. It is also used to record nonjudicial punishment (NJP) that affects pay, any action appeal from NJP that affects the punishment imposed, and administrative actions such as contempt of court charges or restoration of rate upon release from confinement.

PAGE 9—Enlisted Performance Record, NAVPERS 1070/609, is used to record chronologically the evaluation of performace of duty of both regular and reserve enlisted personnel. It also includes notations as to disciplinary actions taken and recommendations for advancement.

PAGE 10—Record of Personnel Actions, NAVPERS 1070/610, provides a means of recording changes in rate, proficiency pay, citizenship, and other administrative entries as directed.

PAGE 11—Record of Naval Reserve Service, NAVPERS 1070/611, provides a chronological record by anniversary year of retirement points earned by Naval Reserve personnel.

PAGE 13—Administrative Remarks, NAVPERS 1070/613, is a chronological record of significant miscellaneous entries not provided for elsewhere or requiring more detailed information.

PAGE 14—Record of Discharge from the Naval Reserve, NAVPERS 1070/615 (Inactive), is prepared upon honorable discharge of an enlisted member on inactive duty by reason of expiration of enlistment or obligated service.

PAGE 15—Report of Separation from Active Duty, DD Form 214N, is used to record data that may be pertinent to an individual in civilian life and is the document used most often to determine eligibility for VA benefits.

The left side of the enlisted service record may contain the following items:

Personnel Advancement Requirement, NAVPERS 1414/4

Enlisted Performance Evaluation Reports

Documents pertaining to security clearances

Orders/Standard Transfer Orders, travel authorizations, and endorsements thereof

Correspondence affecting or concerning the individual

Applications for ID cards

Leave papers and special requests

Certified reproductions of page 9, Enlisted Performance Record, pertaining to prior enlistments

Other miscellaneous papers and documents as appropriate

SECURITY AND CUSTODY OF THE SERVICE RECORD

The service record is the official history of a member's service in the Navy and is the property of the Government and not of the member. Service record pages are a vital and permanent part of the record and entries may not be made except as authorized by the commanding officer. Service records are stored in separate, fire-proof files, provided with combination locks. The files are locked after working hours and access to service records is restricted to authorized persons.

THE HEALTH RECORD

As important as the service record is the individual's health record. From the initial physical examination for entry into Federal service to eventual retirement and beyond, accurate, timely, and complete recording of medical facts in the health record is absolutely essential and cannot be overemphasized. As a senior hospital corpsman you are charged with the responsibility of accurate reporting and recording on medical records. For full information concerning the health record, refer to chapter 9, *Hospital Corpsman 3 & 2*, NAVPERS 10669-B, and chapter 16, Manual of the Medical Department.

LEAVE AND LIBERTY

Subject to supplementary regulations issued by higher authority, commanding officers and officers in charge of activities of the operating forces and shore establishments may grant leave and liberty to members of their command in accordance with the provisions and regulations in BUPERSMAN.

DEFINITIONS

LEAVE is the authorized absence of an individual from a place of duty, chargeable against the individual.

LIBERTY is the authorized absence of an individual from a place of duty not chargeable as leave. (Liberty may not be taken in conjunction with leave.)

EARNED LEAVE is the term used to describe the amount of leave accrued to an individual's credit on any given date. The earned leave balance may indicate a minus leave credit. Earned leave may not exceed 60 days on the first day of each fiscal year or upon discharge, separation, or first extension of enlistment.

ADVANCE LEAVE is the term used to describe the amount of leave that will normally be earned by an individual during the remaining period of active duty.

EXCESS LEAVE is the term used to describe leave granted in addition to the amount of earned leave available and the amount of leave that would normally be earned during the remaining period of obligated active duty.

CONVALESCENT LEAVE is the term used to describe a period of authorized absence granted to persons under medical care and treatment and shall be considered a part of the period of care and treatment. This is not chargeable as leave.

Each person serving in the Navy on active duty shall be entitled to leave at the rate of 2 1/2 days for each month of active duty except as follows:

1. Active duty of less than 30 consecutive days
2. Active duty for training, with pay, of less than 30 consecutive days
3. Periods of lost time (deducted from active-duty pay on a day-for-day basis)
4. Periods of excess leave or other periods in a nonpay status (deducted from active-duty pay on a day-for-day basis)

GRANTING OF LIBERTY

The granting of liberty is an instrument of command management. Liberty may be granted by commanding officers for any period of 96 hours or less. Liberty shall normally be granted outside of normal working hours. Regular liberty shall be granted from the end of normal working hours on a given day to the start of normal working hours on the next working day. Regular liberty periods shall not exceed 72 hours, except in the case of public holiday weekends and periods specifically extended by the President. Special liberty periods of 3 to 4 days (72 and 96 hours) may be granted on special occasions or in special circumstances, such as compensation or special recognition. The Armed Forces Liberty Pass, DD Form 345, may be used to control the authorized absence of enlisted members when, in the judgment of the commanding or senior officer present, it is deemed necessary for security, operational, or other unique circumstances. In all other cases, the Armed Forces Identification Card, DD Form 2N, will suffice to identify an enlisted member on authorized liberty.

GRANTING OF LEAVE

Annual leave may be granted by the commanding officer when service requirements permit.

Upon permanent change of station (PCS), leave may be granted in connection with PCS orders, as stated in the orders.

Emergency leave will be granted by the commanding officer whenever the circumstances warrant.

Convalescent leave may be granted by a member's commanding officer when recommended by a medical officer or the hospital commander. The Commander, Naval Military Personnel Command may grant leave to repatriated prisoners and to others when it is specifically recommended by the Chief, BUMED.

Other types of leave that may be granted include recruiting assistance leave, reenlistment leave, and rest and recuperation leave.

PROMOTION OF OFFICERS

Procedures for promotion of officers are described in BUPERSMAN. The Personnel Division gives assistance with the preparation of fitness reports, physical examination reports, personal histories, certificates of security clearance, duty preferences, transcripts of service, and other documents required to properly record the officer's qualifications and status.

ADVANCEMENT IN RATING

Most advancements in rating are accomplished through a Navy-wide system of competition in all petty officer grades. Advancements are based on demonstrated proficiency in assigned duties, evaluation and recommendation of the commanding officer, needs of the service, and written examinations. All eligible personnel compete for advancement to fill vacancies in the total Navy allowance. E-7, E-8, and E-9 grades must be selected by a board convened in the Navy Department. Grades below petty officer compete at a local level. Procedures for conducting examinations for advancement in rating and change in rating are found in current BUPERSINST 1400 series.

The Personnel Division usually provides:

1. Training of enlisted personnel for advancement through courses for self-study in conjunction with on-the-job training.
2. Determination of eligibility
    a. Assisting the commanding officer in recommending individuals for advancement
    b. Assisting the individuals in completing the Personnel Advancement Requirement and training courses
    c. Recording information to facilitate proof of eligibility. This includes service requirements, path of advancement, and completion of training.
3. Examination of all eligible candidates. This includes ordering examinations and coordinating with the local examining board to ensure that every eligible candidate is provided an opportunity to compete.

Examinations for advancement or change in rating are conducted Navy-wide on specific dates as directed by NMPC.

4. Security of examinations is accomplished by appointment of an officer who receives and has custody of all examinations. After the examination is completed, the test booklets are destroyed under security conditions, and the completed answer sheets are sent to the examination center for evaluation of each examinee's answers. Locally prepared and evaluated examinations for nonpetty officer grades must have comparable security.

EXTENSION OF ENLISTMENT

Under certain conditions personnel may legally be retained beyond the date of expiration of enlistment or other period of obligated service, either voluntarily or involuntarily.

VOLUNTARY EXTENSIONS may be made by the individual at any time prior to the date the extension takes effect, but not thereafter, either for the convenience of the Government or the individual concerned. The Agreement to Extend Enlistment, NAVPERS 1070/621, is prepared as page 1A for the service record. The page is signed by the individual and by the commissioned officer who administers the oath. Parts 1 and 2 provide input to MAPMIS when the agreement is made, canceled, or becomes operative. They are filed in the member's service record in NMPC. Parts 3 through 6 provide data for the field service record, the disbursing officer, and the activity file.

Remember, the agreement is automatically affected unless legally canceled prior to the expiration of the enlistment.

INVOLUNTARY EXTENSIONS may be made under certain conditions if the commanding officer or higher authority considers the individual's retention essential to the public interest. In this case an appropriate entry is made on page 13, Administrative Remarks, NAVPERS 1070/613, of the individual's service record. PAGE 1A IS NOT USED.

SEPARATION OF ENLISTED PERSONNEL

Separation is the term used to encompass all releases from active naval service except death and desertion. It includes discharge, dismissal, revocation of commission, resignation, release from active duty, transfer to the Fleet Reserve or retired list, etc.

A discharge may be issued on one of five types of certificates. The certificate specifies the type of discharge authorized and is issued for a specific reason. The following is an explanation of the types of discharges and a list of reasons for each.

HONORABLE DISCHARGE (USE DD FORM 256N)

An honorable discharge is a separation from the service with honor. A separation with honor may be effected by the individual's commanding officer or higher authority when the individual is eligible for or subject to discharge and it has been determined that he or she merits an honorable discharge under the standards prescribed in this chapter. Issuance of an honorable discharge is conditioned upon:

1. Eligibility for discharge for one of the following reasons:

   a. Expiration of enlistment
   b. Fulfillment of service obligation
   c. Disability
   d. Convenience of the Government
   e. Dependency or hardship
   f. Minority
   g. Unsuitability
   h. Security
   i. When directed by the Commander, Naval Military Personnel Command

2. Proper military behavior and proficient, industrious performance of duty, having due regard to the rate held and the capabilities of the individual concerned

PERSONNEL ON ACTIVE DUTY. During the enlistment, induction, or other service obligation the individual must have made a final overall average of not less than 2.7 and an average of not less than 3.0 in military behavior. An E5 or E6 should not have received two UNM (Unmilitary) or UNS (Unsatisfactory) marks in the same trait in the last 2 years. In addition, the individual must not have been convicted by a general court-martial or by more than one special court-martial. However, in the case of members serving in their first enlistment, induction, or other service obligation, the court-martial convictions will be disregarded if they maintained an average of not less than 3.0 in military behavior during the last 24 months of active service.

PERSONNEL ON INACTIVE DUTY. An honorable discharge will normally be issued unless the reservist has performed active duty of 90 days or more during a Naval Reserve enlistment or service obligation and the service upon the most recent release therefrom was other than honorable, or the member was transferred from the Regular Navy to the Naval Reserve to fulfill his or her service obligation and the service while on such active duty was other than honorable.

A member eligible for a general discharge may receive an honorable discharge if, during the current enlistment or other current period of service, he or she was awarded a Medal of Honor, Navy Cross, Distinguished Service Medal, Silver Star Medal, Legion of Merit, Distinguished Flying Cross, Navy and Marine Corps Medal, Bronze Star Medal, Gold or Silver Life Saving Medal, or any other Armed Forces Award corresponding to any of these decorations, or if the discharge is a result of disability incurred in the line of duty.

GENERAL DISCHARGE (USE DD FORM 257N)

A general discharge may be given for any of the reasons listed under Honorable Discharge. It is a separation from the service under honorable conditions issued to an individual whose military record is not sufficiently meritorious to warrant an honorable discharge. A separation with a general discharge may be affected by the individual's commanding officer or higher authority when the individual is eligible for or is subject to a general discharge and it has been determined that a general discharge is warranted under prescribed standards.

DISCHARGE UNDER OTHER THAN HONORABLE CONDITIONS (USE DD FORM 794N)

A discharge under other than honorable conditions may be issued for misconduct or security reasons.

BAD CONDUCT DISCHARGE (USE DD FORM 259N)

A bad conduct discharge is a separation from the service under other than honorable conditions. It may be given only by approved sentence of general or special courts-martial.

DISHONORABLE DISCHARGE (USE DD FORM 260N)

A dishonorable discharge is a separation from the service under dishonorable conditions. Dishonorable discharges may be given only by approved sentences of general courts-martial. They are appropriate for serious offenses warranting dishonorable separation as included punishment.

SEPARATION PROCEDURES

All enlisted personnel being processed for separation or transferred for separation will be interviewed and counseled concerning reenlistment intent and the commanding officer's recommendation as to reenlistment. The interview will be recorded on page 13 of the service record as required by BUPERSMAN.

Except for members separated upon approval of a medical board, after a complete physical examination, or of a physical evaluation board, every individual separated from the naval service will be given a thorough physical and dental examination prior to separation. This physical examination may be conducted up to 3 months prior to separation, except for the serological tests for syphilis and the skin test for tuberculosis, which must be given within 6 weeks of the separation date, as stated in the Manual of the Medical Department. All entries must be entered in the health record and on the examination form, SF-88, Record of Physical Examination, prior to separation.

On the date of separation, the health, service, pay, and dental records are brought up-to-date and verified. The service record procedures include, but are not limited to, the following:

Page 1—No entries are required. Forward it with the closed out service record.

Page 2—In general, no entries are required for any type of separation except transfer to the Fleet Reserve or retirement. In this case the Survivor Benefit Plan counseling certification as required by current NMPC instructions is entered. Discharge and immediate reenlistment—forward page 2 to the new service record. In all other cases, forward it with the closed out service record.

Page 3—Upon transfer to the Fleet Reserve, release from active duty, discharge, or retirement, except transfer to the Temporary Disability Retired List and release from active duty, page 3 will be removed from the record and given to the individual. If the member is transferred to the Fleet Reserve and retained on active duty or immediately reenlisted, forward page 3 to the new service record.

Page 4—Make discharge entries in accordance with BUPERSMAN and TRANSMAN. Upon discharge, transfer to the Fleet Reserve, and retirement, the original page 4 is delivered to the individual. When the member is transferred to the Fleet Reserve and retained on active duty, or is discharged and immediately reenlisted, remove page 4 from the old service record and place it in the new record. In all other cases, forward it with the closed out service record.

Page 5—Make entry covering time at present station in accordance with BUPERSMAN and TRANSMAN. At the time of separation a copy of page 5 is made. The original is forwarded with the closed service record, except if the member reenlists immediately. For immediate reenlistment forward the original to NMPC and file the copy on the left side of the new service record. In all other cases, give the copy to the member.

Page 6—In all cases, page 6 is forwarded with the closed out service record.

Page 7—In all cases, page 7 is forwarded with the closed out service record.

Page 9—Enter the performance marks assigned since the last reporting period and compute the final trait average and the overall trait average. In all cases, forward page 9 with the closed out service record. Upon discharge and immediate reenlistment, or transfer to the Fleet Reserve or Retired List and retained on active duty, a certified copy of page 9 is placed on the left side of the new service record.

Page 10—In all cases, page 10 is forwarded with the closed out service record.

Page 11—Retain and forward all originals of page 11 when the member is separated for any reason. When the member is discharged and immediately reenlisted, place all duplicate copies of page 11 in the new service record. In all other cases, the copies are delivered to the member.

Page 13—Make discharge entries in accordance with BUPERSMAN and TRANSMAN and forward with the closed out service record.

Page 14—Prepare and distribute in accordance with BUPERSMAN.

Page 15—Prepare and distribute in accordance with BUPERSINST 1900.2 series.

Forward to the Naval Reserve Personnel Center the service record of members discharged without immediate reenlistment, released from active duty with remaining service obligation, transferred to the Temporary Disability Retired List, retired, or transferred to the Fleet Reserve. For members who are deceased, discharged and immediately reenlisted, or in a deserter or missing status, forward the closed out service record to NMPC.

Other forms and papers in the correspondence side may be receipted to the individual, or in the case of discharge and immediate reenlistment, placed on the left side of the new service record.

In all cases of separation, refer to BUPERSMAN and TRANSMAN for full details and procedures.

IMMEDIATE REENLISTMENTS

A qualified individual who wishes to reenlist immediately (within 24 hours) may do so at the discharging activity. After 24 hours have elapsed, the reenlistment must be accomplished at a recruiting station.

The date of the reenlistment will be the day following the date of discharge. This procedure credits the individual with serving both dates and facilitates accuracy in total service computations.

The procedures to be followed include making the appropriate entry of discharge and reenlistment on NAVMED 6150/4, Abstract of Service, and retaining the form in the health record.

The service record procedures include the following:

Page 1—Prepare NAVPERS 1070/601, Immediate Reenlistment Contract, in accordance with PAYPERSMAN, par. 90431, and BUPERSMAN 5030221.

Page 2—If page 2 is not up-to-date, prepare and distribute a new page 2 in accordance with PAYERSMAN, par. 90434, and BUPERSMAN 5030240. If page 2 is accurate, certify it and place it in the new service record.

Page 3—Remove this page from the old service record and place it in the new record.

Page 4—Prepare a new page 4 and place it in the new service record along with the old originals of page 4. Retain all old duplicate copies of page 4 in the old service record. Review and update the last set of page 4 prior to discharge (BUPERSMAN 5030280).

Page 5—After the disbursing officer makes the Reenlistment Bonus entries, move page 5 from the old service record into the new record.

Page 6—Forward it with the old service record.

Page 7—Forward it with the old service record.

Page 9—Prepare a new page 9 for the new service record. Enter the latest set of performance evaluations on the old page 9 along with the final trait average computations. Make a certified copy of the old page 9 and place it in the new service record on the left side (BUPERSMAN 5030360).

Page 10—Forward it with the old service record.

Page 11—Remove duplicates of page 11 from the old service record and place in the new service record. Forward the originals of page 11 to NMPC (BUPERSMAN 5030380).

Page 13—After making discharge entries, forward all old page 13s with the closed out service record. Prepare a new page 13 for the new service record.

Page 14—Prepare and distribute in accordance with BUPERSINST 5030440.

Page 15—Prepare and distribute in accordance with BUPERSINST 1900.2 series.

Remove pertinent forms and documents from the left side of the old service record and transfer them to the left side of the new service record. This applies to all copies of enlisted performance evaluations (which are placed under the Career Performance Data Sheet, NAVPERS 1070/617, along with the certified copy of the old page 9); NAVPERS 1414/4, Personnel Advancement Requirement; and all copies of forms or documents dealing with a security clearance.

Additional requirements for discharge and immediate reenlistment include: recouping and destroying the old ID Card and issuing a new one, recouping and destroying the old Uniformed Services ID and Privilege Cards, as required for dependents, and making appropriate diary entries.

TRANSFER AND RECEIPT OF PERSONNEL

People in the Navy will be transferred periodically from one ship or station to another, sometimes permanently and other times temporarily. The degree of efficiency with which members are transferred and received has a tremendous influence upon their morale and attitude toward the Navy. Effective and expedient processing of personnel in transit is a command responsibility, and each individual involved should do the utmost to prevent snarling the process and giving transients the runaround.

TYPES OF ORDERS

Change of duty orders are orders that detach a member from one duty station and assign him or her to another station.

PERMANENT CHANGE OF STATION ORDERS (PCS) involve detachment from one permanent duty station and assignment to a new permanent duty station. Periods of temporary duty may be included in orders that assign you to a new permanent duty station upon completion of the temporary duty.

TEMPORARY DUTY ORDERS (TEMDU) involve detachment from one station and assignment to another station or stations for temporary duty pending further assignment to a new permanent duty station or for return to the old permanent duty station. Members on temporary duty are not attached to any permanent duty station.

ADDITIONAL DUTY ORDERS (ADDU) assign a member to a duty he or she is to perform is addition to and in conjunction with the permanent duty. No travel is authorized by additional duty orders unless specifically stated in the orders. Additional duty orders apply only to officers.

TEMPORARY ADDITIONAL DUTY ORDERS assign a member to temporary duty in addition to the present duties, directing him or her upon completion of this temporary additional duty to resume regular or temporary duty. When travel is involved, one journey away from the individual's duty station to one or more places and a return journey to the duty station are directed in the orders. Temporary additional duty orders automatically expire when the individual returns to the duty station from which he or she proceeded, unless such return is incident to necessary change of train or plane en route to the next temporary additional duty station involved in the orders and no unnecessary delay is taken in making such change, or unless the individual returns for personal reasons in a liberty or leave status. Personnel on temporary additional duty remain attached to the station from which they initially proceeded on temporary additional duty.

REPEATED TRAVEL ORDERS authorize a member to perform, in addition to the present duties, such travel from time to time as necessary for a purpose stated in the orders, the travel being from the duty station to (and from) points designated in the orders. Repeated travel orders are issued only by the Commander, Naval Military Personnel Command to members who regularly and frequently make trips away from their duty stations in the performance of assigned duties.

FIRST DUTY ORDERS are the first set of orders that assign the following to a permanent duty station:

1. Inactive personnel
2. Persons being newly commissioned from civilian status

TEMPORARY ACTIVE DUTY ORDERS are the set of orders that assign inactive duty members to temporary duty for a limited or unspecified period of time, and which direct, upon completion, release to inactive duty.

RELEASE FROM ACTIVE DUTY ORDERS or separation orders separate members from active duty in the naval service.

TRAINING DUTY ORDERS assign Naval Reserve members to training duty with pay.

Written orders should be issued by competent authority. Verbal or telephone orders must be confirmed by competent authority, either by written orders or by approval of orders written in the field.

TRANSFER OF OFFICER PERSONNEL

Officer's orders usually originate in NMPC. The activity is responsible for proper enodorsement of the orders and instructions to the individual for the execution of the orders.

Detachment procedures should include the following:

- Prepare local checkout sheet
- Make health record entries
    - Physical examination as required
    - Updated immunizations
- Make service record entries
- Complete page 13 of enlisted service record if temporary officer
- Initiate fitness report
- Prepare notification of relief of collateral duties
- Prepare release from responsibility for classified matter
- Issue Notification of Change of Address En Route, NAVPERS 2700/17
- Transmit records and orders to the officer
- Make entry in the personnel diary

TRANSFER OF ENLISTED PERSONNEL

The Commander, Naval Military Personnel Command is responsible for supplying to each naval activity an adequate number of enlisted personnel capable of performing all necessary tasks in order for that activity to carry out its mission.

Since a certain portion of the enlisted population of the Navy is transient, keeping all available personnel properly distributed among all naval activities is a complicated task. The Enlisted Transfer Manual (TRANSMAN) describes the system established by NMPC to put the right person in the right job at the right time.

Activities should establish routine procedures for all enlisted transfers. TRANSMAN gives step-by-step instructions for the transfer of enlisted personnel. The following is an example of the procedures to be followed:

- Prepare local checkout sheet.
- Make health record entries.
    - Physical examination as required
    - Updated immunizations
- Make service record entries.
    - Verify and arrange pages.

  - Make page 5 entry.
  - Page 9—enter transfer evaluation marks.
  - Page 13—enter transfer, notification of relief from membership of boards, etc.
  - Execute disciplinary status letter if required.
  - Ensure that Personnel Advancement Requirements (PAR) are up-to-date and in the service record.
- Prepare Standard Transfer Orders as directed by TRANSMAN.
- Forward advance copy of orders to intermediate and ultimate destinations and local distribution.
- Arrange for pay of personnel.
- Send NAVCOMPT 3067 to disbursing officer for transfer of pay record.
- Assemble and seal service, pay, health, and dental records.
- Make entry for personnel diary.
- Enter loss on daily ration memorandum.
- Give records and orders to member.

Orders for Hospitalization

When transferring enlisted personnel for hospitalization, activities shall prepare Standard Transfer Orders in accordance with instructions in TRANSMAN.

RECEIPT OF PERSONNEL

The Personnel/Records Office should prepare a check-in sheet for receipt of personnel. This list is used to ensure completion of procedures and items such as:

- Endorsement of orders
  - Officer orders to show date, time, place of arrival, and availability of quarters
  - Enlisted orders to show date, time, and place of arrival (endorsement on Standard Transfer Order is self-explanatory)
- Forwarding of pay records to disbursing officer

SERVICE RECORD ENTRIES

- Officer
  - Prepare NAVCOMP 3060 if assigned Government quarters.
  - Check Record of Emergency Data (NAVPERS 1070/602) and prepare new form if necessary.
  - Check Officer Biography Sheet (NAVPERS 5720/1) and prepare a new form if necessary.
  - Procure a new photograph if needed.
  - Make entry in personnel diary.
- Enlisted
  - Compare records and accounts with Standard Transfer Order to ensure that all records are received.
  - Compare person with and verify the service record.
  - Send Personnel Advancement Requirement (PAR), NAVPERS 1414/4, to division officer or appropriate supervisor.
  - Arrange for liquidation of travel claims, if any.
  - Prepare meal pass and any other passes required.

- Make entry in personnel diary.

- Make service record entries in accordance with BUPERSMAN.

- Make health record entries in accordance with MANMED.

DUTY ASSIGNMENT WITHIN THE ACTIVITY

Personnel are assigned duties according to their rank or rate, special qualifications, and the needs of the service. The assignment may be in a clinical service, in a ward, in an administrative office, as a student, or a combination of two or more.

Officer personnel are usually assigned by the commanding officer, if not specifically assigned by NMPC. Experience as indicated by the officer's Naval Officer's Billet Code is generally the guiding factor.

Enlisted personnel are usually assigned by the Personnel/Records Division with the approval of the commanding officer.

When the duties have been assigned:

1. Personnel Tabulating Cards or their equivalent are prepared to indicate the department or departments to which assigned. This facilitates the preparation of the Expense Account Data Sheet and the Hospital Staffing Report.
2. The individual is assigned to a duty section and his or her name is added to the Watch Quarter and Station Bill and the Watch (Duty) List.

PERSONNEL ADMINISTRATION AT NAVAL HOSPITALS, U.S. NAVAL HOSPITALS, NAVAL REGIONAL MEDICAL CENTERS, AND U.S. NAVAL REGIONAL MEDICAL CENTERS

As previously mentioned in this chapter, the personnel problems of the Medical Department are compounded in that there are patients to be considered in addition to the regularly assigned staff personnel. The administrative affairs concerning patients have reached such complexity that separate departments have been created to effectively administer them.

PERSONNEL DIVISION

The mission of the Personnel Division is to administer and coordinate the hospital staff personnel program.

The Personnel Division may be subdivided into the Military Personnel Branch, the Civilian Personnel Branch, the Training Branch, and the Special Services Branch, whose functions are implied by their titles.

PATIENT AFFAIRS DIVISION

The Patient Affairs Division provides and coordinates procedures for the admission and disposition of patients and for the processing and disposition of medical records, reports, and statistics pertaining to their professional treatment and care.

The office of the division chief consists of the Chief, Patient Affairs Division, a legal assistance referral officer, a decedent affairs officer, and staff and clerical personnel as may be assigned. When a full-time legal assistance referral officer or decedent affairs officer is not assigned, the Chief, Patient Affairs Division serves collaterally as either or both.

The division is subdivided into a Registrar Branch, a Medical Records Processing Branch, a Patient Personal Services Branch, and a Medical Information Services Branch. (When workload or staffing is limited, the functions of branches may be combined.)

ADMISSIONS

The primary function of the registrar branch is to provide administrative and staffing support to the patient admission and disposition functions.

The following is a partial list of the procedures that must be followed when a patient applies for admission:

1. Establish patient's eligibility. Remember, all emergencies are treated regardless of

eligibility. Ineligible emergency cases are treated as humanitarian cases until other arrangements can be made.

2. Check patient's records.
3. Prepare an addressograph plate.
4. Initiate a clinical chart.
5. Prepare injury reports, if applicable.
6. Give patient a physical examination and assign him or her to a ward.
7. Arrange for notification of:

    a. Parent command in nontransfer cases; request records and authorization for treatment if applicable.
    b. Next of kin of all admissions placed on serious or very serious lists.

8. Inventory, seal, and label all personal belongings of the patient and send them to the baggage room.

Types of Admissions

A patient who is admitted is given one of the following admission category codes:

"D"—Direct. The admission should be recorded as Direct if the reporting facility is the first medical treatment facility to place the patient under treatment or observation for the current episode of illness or injury.

"FT(M)"—From Transfer (Navy, Army, or Air Force medical facility). The admission shall be considered FT(M) when the inpatient is received from a Navy, Army, or Air Force medical facility. NOTE: If the patient is referred for consultation and subsequently admitted for treatment or observation, the admission category will be Direct.

"FT(O)"—From Transfer (other medical facility). The admission shall be considered FT(O) when the inpatient is received from a civilian (U.S. or foreign) medical facility or from a Government medical facility other than Navy, Army, or Air Force.

"LB"—Live Birth. The admission shall be recorded as LB when the birth of an infant occurs within the confines of the medical treatment facility.

"NBD"—Newborn With Mother Direct. If the birth of an infant occurs outside of the confines of the medical treatment facility and the baby is then admitted with the mother, the category used will be NBD.

"NBFT" Newborn With Mother From Transfer. If the birth of an infant occurs outside of the medical treatment facility, and the mother and child were previously admitted to another medical treatment facility prior to transfer, the category assigned will be NBFT.

OUTPATIENT

All examinations, treatments or consultations given to personnel other than those on the activity's patient census are reported as outpatient workload.

PATIENT ELIGIBILITY FOR HOSPITALIZATION AND TREATMENT

The fact that a person seeking treatment is or was connected with the Federal Government does not automatically entitle him or her to treatment at a naval medical facility. A number of factors determine eligibility to certain types of medical attention and the source and amount of remuneration for that treatment. The following sources will provide up-to-date information concerning eligibility requirements:

SECNAVINST 6320.8 series "Dependents' Medical Care"

BUMEDINST 6320.31 series "Medical Care for Eligible Persons at Naval Medical Facilities"

NAVMED P-5020 "Financial Management Handbook"

CUSTODY AND MAINTENANCE OF PATIENT RECORDS

Patient records are maintained by the Medical Records Branch of the Patient Affairs Division. The basic patient records are the same regardless of the patient's service affiliation. The following records are required by naval medical facilities, with additional forms as prescribed locally by the command.

CLINICAL CHART (not to be confused with the health record). This chart is initiated by the admission section and continued by the wards and departments concerned with the patient's treatments. Upon disposition of the patient, the chart and its contents are sent to the Patient Affairs Division for transcription of pertinent parts for the health record and then filed for future reference. The chart may be retained for two or more years and eventually retired for permanent storage. The clinical chart is composed of:

1. Cover sheet (local form or folder)
2. Clinical chart check-off list (local form)
3. Narrative Summary (SF-502)
4. History—Part I (SF-504)
5. History—Parts II & III (SF-505)
6. Physical Examination (SF-506)
7. Doctor's Orders (SF-508)
8. Doctor's Progress Notes (SF-509)
9. Nursing Notes (SF-510)
10. Temperature-Pulse-Respiration Chart (SF-511)
11. Consultation Sheet (SF-513)
12. Laboratory Report (SF-514 series)
13. Radiographic Report (SF-519A)

NOTE: A variety of additional standard forms are available and may be added to the basic chart as required. Maintenance of the chart is discussed in *Hospital Corpsman 3 & 2,* NAVPERS 10669-B.

HEALTH RECORD. When applicable, the health record is brought up-to-date and forwarded to the Patient Affairs office upon discharge of the patient. Maintenance of the health record is discussed in *Hospital Corpsman 3 & 2,* NAVPERS 10669-B.

SERVICE RECORD. When applicable, the patient's service record will be maintained by the activity having accounting responsibility for the patient. If the medical treatment facility has the accounting responsibility, the service record is kept up-to-date and forwarded to the appropriate agency upon disposition of the patient. Maintenance of the service record has been discussed earlier in this chapter.

ADVANCEMENT IN RATING FOR PATIENTS

Patients may participate in advancement in rating examinations provided they have been recommended and nominated prior to hospitalization, and the hospital commanding officer does not consider the participation detrimental to their health. Being in a patient status in no way interferes with advancement in rating, and eligible personnel shall be advanced as if they had returned to full duty.

DISPOSITION OF PATIENTS

When patients complete their treatment or are ready for other disposition, the ward forwards the completed chart to the Patient Affairs Division for processing, transcription, and disposition. The patient (or an agent when he or she is incapable) checks out through the prescribed departments and offices.

"Discharged" is the term used to indicate disposition for all reasons except death, transfer, and desertion (active duty only). For active duty members, "discharge" means: returned to duty, returned to duty awaiting action of a physical evaluation board, discharged to a medical holding company, etc. For other than active-duty members it can mean: sent home, returned to former activity, departed without authority, etc.

Active-duty personnel are issued written orders, or endorsements on previous orders, to report to their duty assignments. Their health, pay, dental, and service records and their personal effects will normally be forwarded with them. In cases of final release from active duty, the records are sent to the appropriate parent agency.

Patients not on active duty are not issued orders, and their clinical charts are retired to file.

"Died" is the term used when the condition results in death. Disposition of records and personal effects is discussed further in chapter 13 of this manual.

"Deserted" is the term used to dispose of an active-duty patient who has been declared a deserter. The patient's records and personal effects will be disposed of in accordance with BUPERSMAN.

"Transferred" is the term used when a patient is sent to another medical facility for further treatment. It does not apply to movements within the same hospital or command.

CIVILIAN PERSONNEL BRANCH

The Civilian Personnel Branch is charged with administering the civil service programs as they apply to the activity. This is accomplished by the following procedures:

1. Plan, develop, and administer such employment, training, wage classification, and employee service programs as may be appropriate.
2. Advise and assist operating officials in applying Navy civilian personnel rules, regulations, and policies.
3. Advise employees relative to all phases of their employment.
4. Conduct an in-service placement program.
5. Recruit employees.
6. Plan and conduct employee development programs.
7. Advise and assist employees and their supervisors in the preparation of job descriptions or statements of duties and recommended changes in the schedule of wages and classification of positions.
8. Process requests for civilian personnel and position actions.
9. Submit reports as required.
10. Maintain manuals, instructions, and regulations governing civilian personnel administration.
11. Maintain civilian personnel records as prescribed by the Navy Department.

The Navy policy for personnel administration is that each commanding officer must provide for sound management control, direction, and support of the personnel program to ensure consistent, efficient, and equitable personnel management throughout the Navy. The essential elements or functions of a comprehensive personnel program in the Federal Government, as described in the Federal Personnel Manual, are:

1. Policy formulation and issuance
2. Position classification and pay administration
3. Staffing
4. Employee performance evaluation
5. Employee development
6. Employee relations and services
7. Employee recognition and incentives
8. Personnel records and reporting
9. Program evaluation

The assignment of responsibility for carrying out the activities of the personnel program is discussed in Navy Civilian Personnel Instructions (NCPI) and in Office of Industrial Relations and Bureau of Medicine and Surgery Instructions and Notices.

A POSITION is a specific aggregation of all the current duties and responsibilities contained in a work assignment made by a competent authority to be performed by one employee during a full working schedule, whether that schedule be full-time or part-time. Being occupied or vacant does not in itself change a position's identity or character.

All civilian positions must be established in accordance with applicable laws and regulations. At the local level the command is authorized to establish individual civilian positions within the overall civilian ceiling allowance established by BUMED. Positions in grade GS-12 and above and some special categories require approval by BUMED.

MEDICAL INFORMATION SERVICES BRANCH

The Medical Information Service Branch compiles and analyzes statistical data pertaining to the care and treatment of inpatients and outpatients, maintains the tumor registry and the cross-index of diseases and operations, prepares medical/statistical reports as required for the use of the regional medical staff or higher authority, assembles and files clinical records, and maintains the hospital archives.

INJURY REPORT

The *Manual of the Judge Advocate General* requires that an injury report (NAVJAG 5800/15 or NAVMC 10767) be prepared in every case of injury resulting in loss of time from duty in excess of 24 hours or probable disability.

The preparation of this report is a command responsibility that requires the expeditious collection of information following the injury (normally by appointment of an informal investigation). The Medical Department can facilitate this through the use of a complete and well-designed accident report, filled out and distributed promptly. A copy will be retained on file. The data on the form should include:

1. Name, rate, and SSN
2. Hour, date, and place of injury
3. Hour and date first seen by a medical officer
4. Circumstances surrounding the injury and names of witnesses
5. Notation of test(s) administered (alcohol, drugs, etc.)
6. Extent of possible disability
   a. None
   b. Permanent partial
   c. Permanent total
7. Estimation of loss of time from duty as a result of injury
8. Disposition of case

CONCLUSION

The foregoing chapter has laid down the guidelines to effective personnel accounting and maintenance of records. Obviously, to cover the field thoroughly would require volumes of technical narrative, much more than the space alloted here.

The key points necessary for efficient personnel accounting are well worth remembering:

ACCURATE AND TIMELY RECORDING

Recording the facts accurately, within a reasonable period of time, in their proper places and on the appropriate forms, does much to lay the groundwork for gaining the reputation of an efficient personnel office.

MAINTENANCE OF MANUALS AND DIRECTIVES

By keeping your manuals and directives up-to-date and understanding their purposes, you can ensure accurate and current personnel administration. Needless to say, the ability to find the facts and utilize the manuals is as essential as maintaining them.

EFFECTIVE OFFICE ROUTINE

Establishing smooth-running office routines, without duplication and needless paperwork, is an essential attribute of an efficient personnel program. Periodic analysis of check-in and check-out routines and patient admission and discharge procedures will do much toward eliminating obsolete or ineffective facets that do more to hinder than help.

HUMAN RELATIONS

Remember, the word "personnel" means people; the people you work with, those you work for, and those for whom you perform the services. Courtesy, loyalty, and impartial efficient office procedures will ensure your reputation as an outstanding supervisor.

Chapter 12

NAVY MEDICAL FINANCE AND SUPPLY

The responsibility of accounting for assets within the Department of the Navy (DN) comes down from the Secretary of the Navy (SECNAV) to the commanding officers of field activities throughout the Navy through appropriate channels. Commanding officers must ensure proper fiscal administration by directives, principles, and policies prescribed by the Comptroller of the Navy. All orders and instructions issued by the Comptroller carry the same force and effect as if issued by SECNAV.

The Naval Supply Systems Command (NAVSUPSYSCOM) is responsible for administering supply management policies, including cataloging, standardization, procurement, inventory control, storage, issue, and disposal of naval materiel. You, as a medical supply person, must be familiar with the methods of procuring and accounting for naval materiel. You should also be familiar with the rules and regulations that govern accountability of funds under an appropriation and have a good working knowledge of the directives and manuals used in the Navy Supply System.

NAVSUP PUBLICATIONS

To function well in the Navy Supply System, you must be familiar with some of the NAVSUP publications that deal with different facets of supply. Some of these publications that are of particular interest to you are discussed below.

NAVSUP publications are referred to in four different ways. For example, the NAVSUP Operating Procedures Manual for the Military Standard Requisitioning and Issue Procedure and the Military Standard Transaction Reporting and Accounting Procedure (MILSTRIP/MILSTRAP) may be referred to in various publications and directives as one of the following:

- NAVSUP Publication 437
- NAVSUP Pub 437
- NAVSUP P-437
- NAVSUP 437

However, when referencing this publication (or other NAVSUP publications) in correspondence, cite it as "NAVSUP P-437, par____."

STORAGE AND MATERIALS HANDLING (NAVSUP P-284).—This manual establishes efficient standards at major supply installations within each military service as well as among the military services. It consolidates technical and detailed information available to the military services on materiels handling operations involved in the receipt, storage, issue, and care of supplies except for preserving, packaging, and packing. NAVSUP P-284-1 expands on some of the above subjects and prescribes specific policy not affecting the other services. This manual and the supplement are designed for the three-ringed binder.

MILSTRIP/MILSTRAP DESK GUIDE (NAVSUP P-409).—Since NAVSUP P-437 is a comprehensive publication that fills three 2-inch binders, NAVSUP P-409 was published to serve as a handy reference for personnel responsible for originating and processing MILSTRIP/MILSTRAP documents. This small booklet contains common definitions, coding structures, and abbreviated code definitions used on a day-to-day basis. Blank space is provided for entering commonly used routing identifier, fund, project, and locally assigned codes.

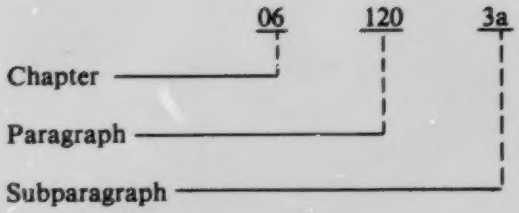
FLEET USE OF MILSTRIP (NAVSUPINST 4235.3).—This publication serves the same purpose of NAVSUP P-409 for fleet personnel. In addition, it is designed to use in indoctrinating and training fleet personnel in the MILSTRIP system. It is larger than the desk guide and contains illustrations and explanations, making it a valuable training aid and a handy reference.

OPERATING PROCEDURES MANUAL FOR MILSTRIP/MILSTRAP (NAVSUP P-437).—This publication issues policy on the MILSTRIP/MILSTRAP system. This publication takes precedence over conflicting provisions contained in other supply system manuals or directives. It consists of 10 chapters and several appendixes and exhibits. It covers system management, requisitioning ashore, inventory control, financial matters, materiel movement priorities, and evaluation procedures. The publication provides forms, formats, and codes, and it serves as a comprehensive ready reference for those involved in preparing or processing MILSTRIP documents. The chapters are listed below.

Chapter	Title
1	Introduction
2	Supply System Management
3	Requisitioning Ashore
4	Inventory Control at Stock Points
5	MILSTRIP/MILSTRAP Financial Inventory Accounting
6	Materiel Movement
7	Uniform Materiel Movement and Issue Priority System
8	Expendable Ordnance
9	Military Assistance Program (MAP)
10	Performance Reporting

NAVSUP P-437 is not distributed afloat. All afloat MILSTRIP/MILSTRAP operations are incorporated into NAVSUP P-485.

Paragraph numbering in this publication is similar to that of the NAVSUP Manual. Paragraph 06120-3a is broken down as follows:



AFLOAT SUPPLY PROCEDURES (NAVSUP P-485).—This publication establishes policies for operating and managing afloat supply departments and activities. It will help supply personnel to understand and perform their individual tasks.

Although this publication is designed primarily for nonautomated supply procedures, much of the information it contains also applies to automated systems.

The procedures contained in this publication are the minimum essential to acceptable supply management and are mandatory unless specifically stated as being optional. It encompasses the procedures outlined in NAVSUP Manual, Volumes I, II, and V, and NAVSUP P-437 as they apply to afloat situations. It is divided into six chapters as follows:

Chapter	Title
1	Organization and Administration
2	Material Identification
3	Materiel Procurement
4	Materiel Receipt, Custody, and Stowage
5	Materiel Expenditure and Shipment
6	Inventory Management

In addition to these six chapters, NAVSUP P-485 contains several appendixes that contain such information as advice codes, document identifier codes, fund codes, and units of issue.

CHANGES TO PUBLICATIONS

Regardless of how well you have learned to use the various supply publications, if they aren't up-to-date you are wasting your time. Enter changes promptly when they are received to ensure that the latest information is being used. There are different types of changes and the methods of entering them are different. Always read the accompanying instructions before making the change.

Pen-and-ink Changes.—These are usually distributed as a letter or notice and require you to type or enter pen-and-ink word or sentence changes.

Page Changes.—Extensive changes are made by this method. This involves removing an old page and inserting a new one. Most of these changes will include a list of "Effective Pages" or "Sheets in Force" that should be checked against the manual after the change has been made to ensure that all the pages are there.

Change Bulletin.—This change is usually used for stocklists, catalogs, and cross-reference listings. The change bulletin will refer to the basic publication and will state whether it is cumulative or noncumulative. A cumulative change bulletin is one that contains all changes previously issued. Discard the older bulletins. Retain the noncumulative change bulletins until the basic publication is reprinted. Always read the instructions BEFORE you make the change.

APPROPRIATIONS

An appropriation is an authorization by an Act of Congress (Appropriation Act) to incur obligations for a specified time and purpose and to make payments out of the Treasury. The Navy uses this form to receive money to pay for ships and the cost of their operation and maintenance, the cost of training and pay of the personnel who operate them, and the money to operate the Shore Establishment needed to support the fleet.

TYPES OF APPROPRIATIONS

Three types of appropriations may be used in the Navy, depending upon the purpose for which they are issued. Most appropriations are for 1 fiscal year (FY) and are used to finance the normal operating costs of the Navy. Other types may be granted without a time limitation or for a specific time that exceeds 1 year.

Annual Appropriations

Annual appropriations generally cover the current operating and maintenance expenses of the Navy. They become available at the beginning of the FY as stated in the Appropriation Act. From then on throughout the FY, they may be either directly expended or obligated. An obligation occurs when an order is placed by an afloat unit or when materiel is issued to a shore activity. It also occurs when a contract is awarded, a service is received, or similar transactions are entered into during a given period requiring future payments of money in an agreed amount.

After the end of the FY, the Navy must return any unobligated balance to the Treasury, and obligated funds remain available for the payment of such obligations for an additional 2 years.

At the end of the additional 2-year period, transfer the balance remaining in the account, representing unliquidated obligations less reimbursements to be collected, to the successor "M" account. The successor "M" account is available for disbursement of appropriated funds.

Continuing Appropriations

A continuing appropriation, or a no-year appropriation, is one that is available for incurring obligations until the funding is exhausted or until the purpose for which it was made is accomplished without a fixed-period restriction. Examples of continuing appropriations are Military Construction Navy and revolving funds such as the Navy Stock Fund (NSF).

Continuing appropriations become available for obligation and expenditure at the beginning of the FY following the passage of the Appropriation Act or may become immediately available when so specified in the act. When the purpose of a continuing appropriation has been accomplished, or at such time as determined administratively or by Congress, transfer an amount equal to the total of unliquidated obligations, less the total of reimbursements to be collected, to the successor "M" account. Transfer the remaining unobligated balance to the surplus of the Treasury.

Multiple-Year Appropriations

Multiple-year appropriations are generally made for purposes that require a long lead time of planning and execution, such as Procurement of Aircraft and Missiles Navy and Shipbuilding and Conversion Navy. Multiple-year appropriations become available for obligation and expenditure at the beginning of the FY designated in the Appropriation Act unless otherwise stated in the act. They are available for incurring obligations only during the FYs specified in the act. However, they are available for paying such obligations for an additional 2 years.

At the end of the last FY included in the appropriation, when the appropriation expires for obligation purposes, transfer the unobligated balance to the Treasury. At the end of the 2 years following the expiration of obligation availability, transfer the balance remaining in the account, representing unliquidated obligations less reimbursements to be collected, to the successor "M" account.

STATUS OF APPROPRIATIONS

Three terms are used to designate the status of appropriations.

- Current Appropriation—an appropriation that is available for incurring obligations during the current FY

- Expired Appropriation—an appropriation that is no longer available for incurring obligations but remains available for disbursements to liquidate existing obligations

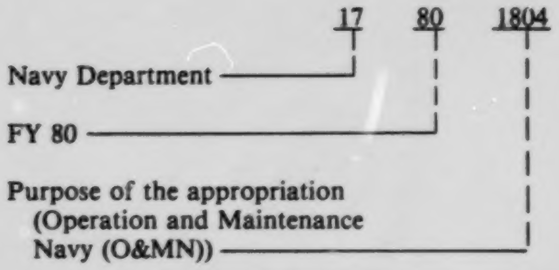
- Lapsed Appropriation—an appropriation in which the undisbursed balance, by law, is no longer available for disbursement

By way of explanation, let's follow an annual appropriation for FY 80 by the above terms.

Current appropriation 1 Oct 79—30 Sep 80, is available for obligation and disbursement. At the end of the FY (30 Sep 80), the Navy must return any unobligated balance to the Treasury. Expired appropriation, 1 Oct 80—30 Sep 82, means no new obligations may be incurred. The obligated balance is retained and disbursements may be made to liquidate the obligations. Lapsed appropriation, 1 Oct 82, means no further disbursements may be made. Any balance of outstanding unliquidated obligations remaining is transferred to a successor account that is available indefinitely for payment of obligations still outstanding.

APPROPRIATION SYMBOLS

The Navy uses symbols to identify charges and credits made against each appropriation. Since you use these symbols often, it is important that you understand how they are constructed. The various elements that make up the appropriation symbol are explained below.


17
80
1804
Navy Department
FY 80
Purpose of the appropriation (Operation and Maintenance Navy (O&MN))

All appropriations assigned to the Navy are identified by "17" that is shown as the first two digits of the appropriation symbol.

The next one or two digits identify the FY limitation of the appropriation. In the example, "80" designates FY 80. Continuing appropriations, which have no FY limitation, are identified by an "X." A multiple-year appropriation is indicated by the first and last FYs that it is available for obligation; for example, "0/1" indicates FYs 80 and 81.

The purpose of the appropriation is shown by the next four digits. The numerals "1804" shown above identifies the appropriation for O&MN, which is used for operation and maintenance expenses for both afloat units and shore activities.

APPROPRIATION CATEGORIES

The Navy and Marine Corps appropriation structure is based on major programs or several broad categories that remain relatively constant and encompass most of an activity's funding. These appropriation categories include the following:

Military Personnel Navy (MPN) and Military Personnel Marine Corps (MPMC).—These appropriations provide for the pay and allowances, clothing, and PCS orders of active duty Navy and Marine Corps personnel.

Reserve Personnel Navy (RPN) and Reserve Personnel Marine Corps (RPMC).—These appropriations provide the same type of requirements for Reserve personnel programs as the MPN and MPMC.

Operations and Maintenance Navy (O&MN) and Operations and Maintenance Marine Corps (O&MMC).—These are the bread-and-butter annual appropriations for most Navy and Marine Corps activities. They pay for the day-to-day expenses of the Navy and Marine Corps. For most activities, the O&M appropriation provides funds for the operating budget, which is the master financial planning and control document for the activity. The operating budget contains estimates of workload, manpower, and monies required.

Operations and Maintenance Navy Reserve (O&MNR) and Operations and Maintenance Marine Corps Reserve (O&MMCR).—These provide for the day-to-day support of the Navy and Marine Corps Reserves.

ALLOTMENTS

An allotment is an authorization, expressed in specific dollar amounts, granted by a competent authority to commit, obligate, and expend funds for a particular purpose. Obligation and expenditure of the funds may not exceed the amount specified in the allotment, and the purpose for which the authorization was made must be adhered to.

The holder of an allotment may issue suballotments under appropriate circumstances. The holder of a suballotment may create commitments and obligations against appropriations within the scope of the suballotment.

OPERATING BUDGETS

An operating budget is the annual budget of an activity. Operating budgets are assigned by the Chief of Naval Operations, Fiscal Management Division, to major claimants. A major claimant is a bureau, office, command, or Headquarters, Marine Corps, designated as an administering office under O&MN. Subclaimants are offices, bureaus, and commands that are designated as administering offices and receive a subclaimant operating budget from a major claimant. Holders of operating budgets may grant subordinates a degree of financial responsibility by issuing operating targets (OPTARS). Medical OPTAR funds are used to fulfill four major requirements.

- Authorized Medical Allowance List (AMAL)—the minimum amount of medical materiel to be maintained on board a ship at any time, normally a 12-month supply. The amount of materiel noted in the AMAL is set by BUMED. The AMAL is used as a guide in developing medical stock. Forward recommendations for changes through the chain of command.

- Type Commander's (TYCOM)—to supplement AMALs, TYCOMS may have additional requirements to maintain units in a high state of readiness and to allow units to be self-supporting in an emergency. TYCOM requirements for medical considerations relate to such items as first aid gun bags, plastic airways, litters, and battle dressing station supplies.

- Special mission usage

203

- Administrative—the purchase of consumables or medical OPTAR restricted items may be made from this OPTAR with the approval of the executive officer. Books and publications required for all ships, as listed in BUMEDINST 6820.4, may be purchased with this OPTAR.

FEDERAL CATALOG SYSTEM (FCS)

The FCS names, describes, classifies, and numbers all items carried under centralized inventory control by the Federal Government. Only use one identification for each supply item. The FCS is also used by NATO countries.

To order supplies effectively from this system, you must first have an understanding of its terminology.

Materiel—all supplies, repair parts, equipment, and equipage

Equipment—any functional unit of hull, mechanical, electrical, ordnance, or electronic materiel operated singly or as a component of a system or subsystem. It is a nonconsumable item.

Consumable—all supplies consumed in use

Stock Unit—the smallest quantity of a supply item

Standard Stock—material under the control of an inventory manager and identified by a National Item Identification Number (NIIN)

Reserve Stock—items on hand and available for issue for a specific purpose but not for general use

Bulk Stock—materiel carried in stock for future use in full unbroken containers

Repair Part—a replaceable part of machinery or equipment

Equipage—equipment that is under management control due to high replacement cost, likelihood that it may be stolen, or is highly essential to accomplish the activity's mission

FEDERAL SUPPLY CLASSIFICATION (FSC) SYSTEM

The FSC System classifies all supplies used by the Federal Government. Each item is identified by a four-digit FSC Class. The first two digits identify the group or major class of commodities within the group. The combination of the four digits forms the class of materiel. An example is 6505, Drugs, Biologicals, and Official Reagents.

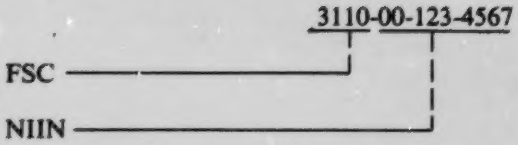
Cognizance Symbols

These symbols are supply management codes that identify the Navy inventory manager of the specific category of materiel in which the item is included. The cognizance symbol for all Navy-owned bulk medical materiel is "9L."

National Stock Numbers (NSN)

An NSN is a 13-digit stock number that identifies an item in the supply distribution system of the United States. It consists of the four-digit FSC and a nine-digit NIIN. The NIIN consists of a two-digit National Codification Bureau (NCB) code and seven digits which, in conjunction with the NCB code, identify each NSN item in the Federal Supply Distribution System.

An example of an NSN is:



Navy Item Control Numbers (NICN)

NICNs identify items of materiel that are not included in the FCS but which are stocked in the Navy Supply System. These are 13-character numbers assigned by inventory managers for either temporary or permanent control.

Local Item Control Numbers

Technically any item identification number assigned by an activity for its own use is an NICN. However, to distinguish between NICNs authorized in supply transaction documents and those that are not, the term local item control number is often used instead of the NICN. The local item control number consists of 13 characters with the fifth and sixth digits being LL. A full explanation of the composition of NICNs, NIINs, and local item control numbers is contained in NAVSUP P-485, Afloat Supply Procedures.

FEDERAL SUPPLY CATALOG

This publication contains all standard stock items available to the agencies of the Federal Government. It furnishes identification and management data for single manager supply items. The sections of the catalog of greatest interest to you are those dealing with medical items listed below in figure 12-1. Each subsection deals with specific categories of materiel.

The following is a subsection description of the Federal Supply Catalog, Medical Materiel, 6500 section:

- Introduction—provides a general overview of the contents and use of the catalog

- Alphabetical Index—a list of item names, synonyms, colloquials, common names, and trademarks referenced to index numbers to help locate an item within the subsection

- Glossary of Colloquial Names and Therapeutic Index (6505/6508 subsections only)—contains colloquial names, synonyms, and trade names arranged in alphabetical order and cross-referenced to appropriate National Item Names. It further classifies items by therapeutic use

- Identification List (IL) contains the following:

  - Preface—each subsection contains a preface that includes special instructions pertaining to that individual subsection

  - Alphabetical Index—a list of National Item Names cross-referenced to index numbers to help locate an item when the NSN is not known

  - National Stock Number Index—a list of NSNs arranged in numerical sequence and referenced to index numbers to help locate an item within a subsection

  - Identification Data—the following data are arranged alphabetically by the item name under which it is identified in the FCS. Some items will be illustrated for clarity.

  - Action Codes—denote additions, deletions, or revisions of published data as follows:

    N—new indicates items not previously included in the basic publication, change bulletin, or change notice; or a reinstatement of a previously deleted item.

    C—change indicates a change in data since the previous publication.

    D—deletion indicates an item is no longer available.

  - Index Numbers—items are presented in alphabetical order; index numbers are assigned in ascending sequence within each pamphlet. They are used solely as a locator device and not in lieu of an NSN.

  - National Stock Number Index—NIINs are listed in numerical order.

  - Descriptive Data—important distinguishing characteristics are stated in this section.

  - Description—appears below the item name and above the box in which the index number, NSN, and descriptive data are arranged. Operational data may appear as a footnote.

  - Notes—information regarding special storage and handling of an item are as follows:

    B—corrosive or poisonous material

    D—subject to deterioration within 36 months

Title	Publication Number
FSC GROUPS 30 THROUGH 63 (Items of Medical Materiel Only)	C-3000/6300-IL
FSC CLASS 6505, Drugs, Biologicals, and Official Reagents/ FSC Class 6508, Medicated Cosmetics and Toiletries	C-6505/6508-IL
FSC CLASS 6510, Surgical Dressing Materials	C-5610-IL
FSC CLASS 6515, Medical and Surgical Instruments, Equipment, and Supplies	C-6515-IL
FSC CLASS 6520, Dental Instruments, Equipment, and Supplies	C-6520-IL
FSC CLASS 6525, X-Ray Equipment and Supplies: Medical, Dental, Veterinary	C-6525-IL
FSC CLASS 6530, Hospital Furniture, Equipment, Utensils, and Supplies	C-6530-IL
FSC CLASS 6532, Hospital and Surgical Clothing and Related Special Purpose Items	C-6532-IL
FSC CLASS 6540, Opticians' Instruments, Equipment, and Supplies	C-6540-IL
FSC CLASS 6545, Medical Sets, Kits, and Outfits	C-6545-IL, Vol 1
FSC GROUP 66, Instruments and Laboratory Equipment (Medical Materiel)	C-6600-IL
FSC GROUPS 67 THROUGH 95 (Items of Medical Materiel Only)	C-6700/9500-IL
COMPONENTS OF SETS, KITS, AND OUTFITS	C-6545-IL, Vol 2
MANAGEMENT DATA LISTS	*
ALPHABETICAL INDEX	C-6500-AL
CHANGE BULLETIN (Medical Materiel) IDENTIFICATION LISTS	C-6500-IL-CB
CHANGE BULLETIN (Medical Materiel) MANAGEMENT DATA LISTS	C-6500-ML-CB
GLOSSARY OF COLLOQUIAL NAMES AND THERAPEUTIC INDEX	C-6505-GL

*A separate management data list (ML) is published for each identification list (IL) segment of the catalog. These are numbered as C-6505/6508-ML, C-6510-ML, etc. The authorized substitute items are published in the MLs.

Figure 12-1.—Federal Supply Catalog, medical materiel section.

F —subject to damage by freezing

G —requires refrigeration

I —flammable or oxidizing material

M—an item containing potentially recoverable precious metals

P —an item with potency period or expiration date

Q —drug or other item requiring security storage

R —alcohol, alcoholic beverages, precious metal, or other substances requiring storage

W—item must be kept frozen

- Navy Management Data List (NMDL)—it contains information such as price and unit of issue. Authorized substitutions are listed here. A separate NMDL is published for each IL segment of the catalog.

PROCUREMENT

Procurement is the act of obtaining materiels or services. Materiel may be procured by requisition or purchase. Requisitions are most frequently used, but purchase is used for procuring nonstandard materiel and emergency requirements.

REQUISITIONING

MILSTRIP is used for ordering all materiel except for certain classes of materiel listed in NAVSUP P-485. All items ordered from the Navy Supply System, other military installations, the Defense Logistics Agency (DLA), and the General Services Administration (GSA) will be procured using the MILSTRIP system. MILSTRIP requisitioning is based upon the use of a coded, single-line item document for each supply transaction. One of the following will be used.

DD 1348, DOD Single-Line Item Requisition System Document (Manual), is used by nonautomated ships without keypunch facilities as a requisition, requisition followup, modification, and cancellation and tracer requests on overdue shipments sent by insured, registered, or certified mail. This form is available in two-, four-, and six-part sets. See figure 12-2.

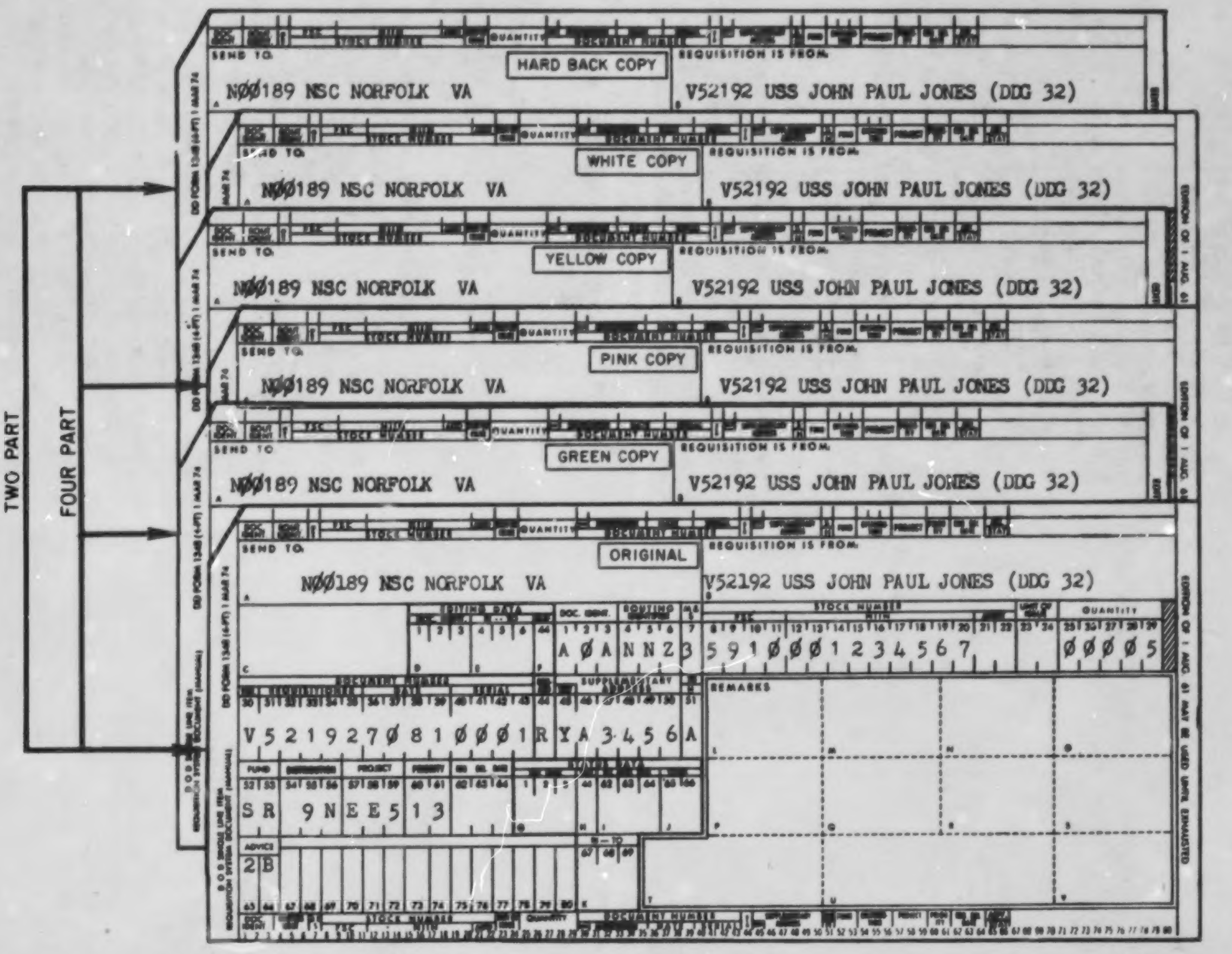
The two-part set is not used for requisitioning by afloat units but is used by nonautomated ships for requisition followup, modification, and cancellation and tracer requests. The four-part set is used for requisitioning from shore activities. The six-part set is used for requisitioning from other nonautomated ships and from automated ships when required.

NAVSUP 1250-1, Single-Line Item Consumption/Requisition Document (Manual), is a multipurpose form used as a consumption document by submarine forces, as a MILSTRIP requisitioning document by nonautomated ships of the submarine forces, and as an invoice document.

DD 1348m, DOD Single-Line Item Requisition System Document (Mechanical), is a standard manilla punchcard that is used for requisition, requisition followup, modification, and cancellation and tracer requests. It is also used by automated shore activities for various supply actions.

DD 1348-6, Non-NSN Requisition (Manual), is a six-part form used for requisitioning non-NSN items when the Federal Supply Code for manufacturers exceeds 15 digits.

DD 1149, Requisitioning and Invoice/Shipping Document, is used for certain items that are excluded from MILSTRIP. These items are listed in NAVSUP P-485. DD 1149 may be used as a requisitioning or receipt document. As a requisitioning document, use this form to procure GSA contract items, such as medical books and journals and standard nonstocked and nonstandard BUMED-controlled items requiring local purchase action. Also, use this form for items that cannot be adequately described, transferred, expended, or receipted on a DD 1348.


TWO PART
FOUR PART

HARD BACK COPY
SEND TO: N00189 NSC NORFOLK VA
REQUISITION IS FROM: V52192 USS JOHN PAUL JONES (DDG 32)

WHITE COPY
SEND TO: N00189 NSC NORFOLK VA
REQUISITION IS FROM: V52192 USS JOHN PAUL JONES (DDG 32)

YELLOW COPY
SEND TO: N00189 NSC NORFOLK VA
REQUISITION IS FROM: V52192 USS JOHN PAUL JONES (DDG 32)

PINK COPY
SEND TO: N00189 NSC NORFOLK VA
REQUISITION IS FROM: V52192 USS JOHN PAUL JONES (DDG 32)

GREEN COPY
SEND TO: N00189 NSC NORFOLK VA
REQUISITION IS FROM: V52192 USS JOHN PAUL JONES (DDG 32)

ORIGINAL
SEND TO: N00189 NSC NORFOLK VA
REQUISITION IS FROM: V52192 USS JOHN PAUL JONES (DDG 32)

DOC. IDENT.	ROUTING IDENT.	M & S	STOCK NUMBER	QUANTITY
A 0 A	N N Z	3	5 9 1 0 0 0 1 2 3 4 5 6 7	0 0 0 0 5

DOCUMENT NUMBER	DEMAND	SUPPLEMENTARY ADDRESS	SIGNAL
V 5 2 1 9 2 7 0 8 1 0 0 0 1	R	Y A 3 4 5 6	A

FUND	DISTRIBUTION	PROJECT	PRIORITY	ADVICE
S R	9 N	E E 5	1 3	2 B

REMARKS

43.24

Figure 12-2.—DOD Single Line Item Requisition System Document (Manual), 2-, 4-, and 6-part form, DD Form 1348.

208

BUMED-Controlled Items

BUMED-controlled items are essential to preserve life, are easily pilfered, and have a high acquisition or replacement cost. Requisition standard stocked BUMED-controlled items on a DD 1348, and forward the requisitions for technical review through the chain of command to the Naval Medical Materiel Support Command (NAVMEDMATSUPPCOM). NAVMEDMATSUPPCOM also reviews and approves standard nonstocked and nonstandard item requisitions.

Professional Books and Publications

The listing of professional books and publications that are required to be maintained at an activity are in BUMEDINST 6820.1. GSA periodically makes open-end contracts that cover the procurement of books. All books are procured under the provisions of these contracts.

Small Purchases on the Open Market

The term small purchase refers to purchases not in excess of $10,000. This term includes only the procurement of supplies and services other than personal services that are authorized to be made from commercial suppliers by purchase orders.

Imprest Fund

The imprest fund is a small amount of money at an activity that is used for making purchases on the open market. All purchases are paid for in cash, and no one purchase may exceed $150 except in emergencies when $300 is the limit.

The authorization to set up an imprest fund must be in writing, and the amount of the fund must conform to the command's actual needs (usually $1000). In any event, the maximum may not exceed $5000. The fund is reviewed quarterly to determine current needs.

UNIFORM MATERIEL MOVEMENT AND ISSUE PRIORITY SYSTEM (UMMIPS)

UMMIPS is a vital part of the MILSTRIP system. It was established to ensure that materiel issue requests are processed according to the military IMPORTANCE of the requiring activity and the URGENCY of the need.

MILSTRIP provides forms and procedures for requisitioning materiel, and UMMIPS provides the method of assigning priorities for issuing and moving the materiel. In moving and issuing materiel, it is necessary to provide a common basis to identify the relative importance of completing demands for logistics systems resources. These resources include transportation, warehousing, introduction of requisitions for processing, and materiel assets. The means for determining the relative importance and urgency of logistic requirements is provided by UMMIPS through a series of two-digit issue priority designators.

Force/Activity Designator (F/AD)

An F/AD is a Roman numeral (I-V) that identifies and categorizes a force or activity on the basis of its military importance. The assignment of F/ADs is shown in NAVSUP P-485.

Urgency of Need Designator (UND)

The UND is an uppercase letter of the alphabet (A, B, or C) selected to indicate the relative urgency of a force or activity's need for a required item of materiel. Assignment of UNDs is the responsibility of the force or activity requiring the materiel. UNDs and their associated definitions are as follows:

UND	Definition
A	(1) Requirement is immediate. (2) Without the materiel needed, the activity is unable to perform one or more of its primary missions. (3) The condition noted in definition (2) has been reported by established not operationally ready supply/casualty report (NORS/CASRPT) procedures.

UND	Definition
B	(1) Requirement is immediate or it is known that such requirement will occur in the immediate future. (2) The activity's ability to perform one or more of its primary missions will be impaired until the materiel is received. (3) This comprises immediate stock replenishment requirements of customer mission-essential materiel at overseas forward area supply activities including mobile logistics support force (MLSF) ships. It occus when the on-hand quantity is below the safety level and is expected to reach a zero balance before receiving the stock due in.
C	(1) Requirement is routine.

Issue Priority Designator (IPD)

The IPD is a two-digit number (01-highest to 15-lowest) determined by using the table of priority designators shown in figure 12-3. The table is easy to use. For example, if your ship is assigned an F/AD of III and your requirement is of a routine nature, assign priority 13.

In addition to providing standardized criteria for assigning priorities, UMMIPS provides acceptable maximum processing times for use by supply activities in furnishing materiel. Processing time standards and additional codes used in MILSTRIP and UMMIPS are included in NAVSUP P-485.

DD 1348

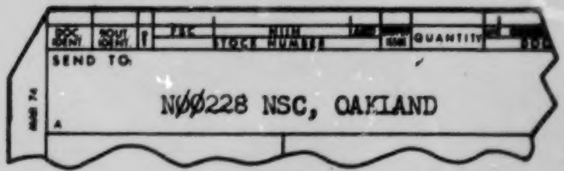
Preparation

Most of the information shown on DD 1348 is represented by codes. These codes apply to all levels of supply and are too extensive for all to be included in this chapter. However, some of the more common are included in the data block entry descriptions below. The codes are published in appendixes of NAVSUP P-485.

Prepare DD 1348 by typewriter or ballpoint pen. Do not use pencil because pencil marks can cause errors when the requisition is processed through mark-sensing equipment at shore activities. In preparing requisitions, do not space the entries within the "tic" marks printed on the forms, but make sure the entries are made within the proper data blocks. To eliminate any possible confusion between numeric zero and an alphabetic "O," use the communication zero (Ø) on MILSTRIP requisitions when zeros are applicable.

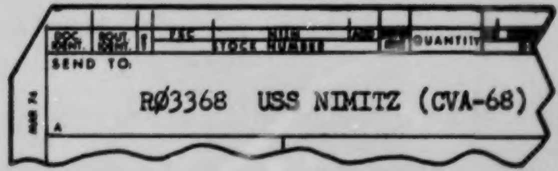
In the descriptions below, show the data block letter or number first, then the field legend, or title, as printed on the form, and finally, a description or explanation of the data shown in that block.

DATA BLOCK A, SEND TO.—Identification of the supply source is a mandatory entry. If the requisition will be submitted to a shore activity, enter the service designator code (SDC), unit identification code (UIC), name, and location of the activity to which the requisition will be submitted. See the sample entry in the next illustration.



NØØ228 NSC, OAKLAND

If the requisition will be submitted to another ship, enter the SDC, UIC, name, and hull number of the ship as shown in the next illustration.



RØ3368 USS NIMITZ (CVA-68)

DATA BLOCK B, REQUISITION IS FROM.—Identification of the requisitioner is a

UMMIPS (UNIFORM MATERIEL MOVEMENT AND ISSUE PROCEDURES) (CARD COLUMNS 60-61)

Combining the assigned F/AD (Force/Activity Designator) and the appropriate UND (Urgency of Need Designator) will enable the requisitioner to determine the appropriate Priority Designator. It should be noted that an assigned F/AD normally limits the requisitioner to choosing from three Priority Designators consistent with the UND. For example, a requisitioner assigned FAD III will normally select Priority Designator 03, 06 or 13 based on the requisitioner's determination as to whether the UND is A, B or C. The following table illustrates the above relationship:

UMMIPS: HOW TO DETERMINE THE RIGHT PRIORITY

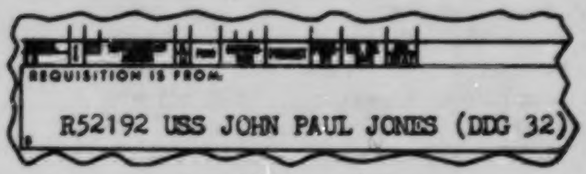
	URGENCY OF NEED DESIGNATORS*		
	Unable to Perform Mission	Impaired Operational Capability	Routine
Force/Activity Designators*	A	B	C
I In Combat	1	4	11
II Positioned For Combat	2	5	12
III Positioned To Deploy/Combat	3	6	13
IV Other Active & Selected Reserve Forces	7	9	14
V All Other	8	10	15

Numeric Priorities

*For additional detailed guidance concerning Force/Activity Designators and Urgency of Need Designators, see OPNAVINST 4614.1E.

Figure 12-3.—Listing of priority designators.

mandatory entry. Enter the SDC, UIC, name, and hull number of the requesting ship as shown below.


REQUISITION IS FROM:

R52192 USS JOHN PAUL JONES (DDG 32)

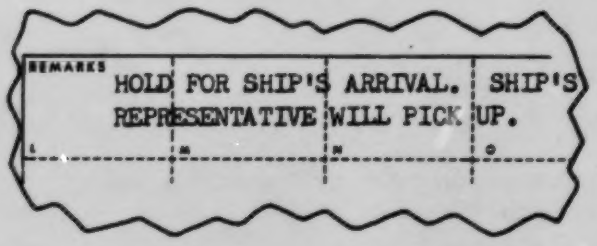
DATA BLOCK C.—At the discretion of the supply officer, enter the name of the requested item in data block C or leave it blank.

DATA BLOCKS D, E, AND F, EDITING DATA.—These blocks are left blank.

CARD COLUMNS (CCs) 1-3, DOCUMENT IDENTIFIER.—The document identifier identifies the purpose of the document, such as requisition, followup, and cancellation. The appropriate three-position document identifier code is entered as follows:

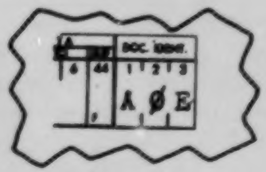
Requisition for overseas shipment		Requisition for domestic shipment
A01	With NSN/NATO number	A0A
A05	With exception data	A0E

When a requisition contains ANY information in the REMARKS block, such as authority for the requisition, special accounting data, special delivery instructions, or additional identification information, the requisition is said to contain exception data. See the REMARKS section of the illustration below.


REMARKS

HOLD FOR SHIP'S ARRIVAL. SHIP'S REPRESENTATIVE WILL PICK UP.

The document identifier A05 or A0E is used as indicated here.


DOC. IDENT.

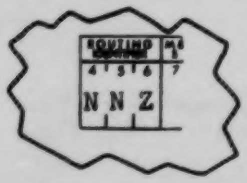
1 2 3

A 0 E

CCs 4-6, ROUTING IDENTIFIER.—Routing identifiers are three-character codes that identify a specific activity. They are assigned to all DOD and GSA supply support activities and other activities ashore with supply departments. The routing identifier must agree with the activity shown in data block A. This block is left blank on requisitions submitted to non-automated ships for which no routing identifier is assigned. Many of the naval supply activities show more than one routing identifier. For example, NSC, Norfolk VA, has the following routing identifiers:

NNC-DCSC	Construction supplies
NNE-DESC	Electronic supplies
NNG-DGSC	General supplies
NNI-DISC	Industrial supplies
NNM-DPSC	Medical supplies
NNO-DSA	Stocks attrited to GSA
NNS-DPSC	Subsistence supplies
NNT-DPSC	Clothing and textiles
NNZ	Navy materiel

On all requisitions to a supply activity, use the routing identifier for Navy materiel, for example, NNZ for NSC, Norfolk as shown here. The others are for interservice transactions.


ROUTING IDENTIFIER

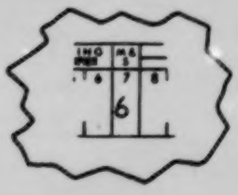
4 5 6 7

N N Z

CC 7, M&S CODE.—The media and status (M&S) code is a single-character code that indicates the type of status required, who is to receive the status, and how the status is to be furnished, for example, communications media. Appropriate codes may be selected to provide:

- No status
- Exception status
- Exception status plus shipping status
- 100% supply status
- 100% supply status plus shipping status

Ships not equipped with transceivers must not assign codes 2, 4, B, D, K, M, S, and U because these codes request status by transceiver. For example, when the requisitioner desires exception status by message, the M&S code in the data block will be 6 as illustrated.



CCs 8-22, STOCK NUMBER—1.—When requisitioning materiel with an NSN, enter the four-character FSC in CCs 8-11; enter the two-character NCB code and the remaining seven characters of the NIIN in CCs 12-20. When applicable to a designated item, enter the two-character special material identification code (SMIC) in CCs 21-22. See figure 12-4.

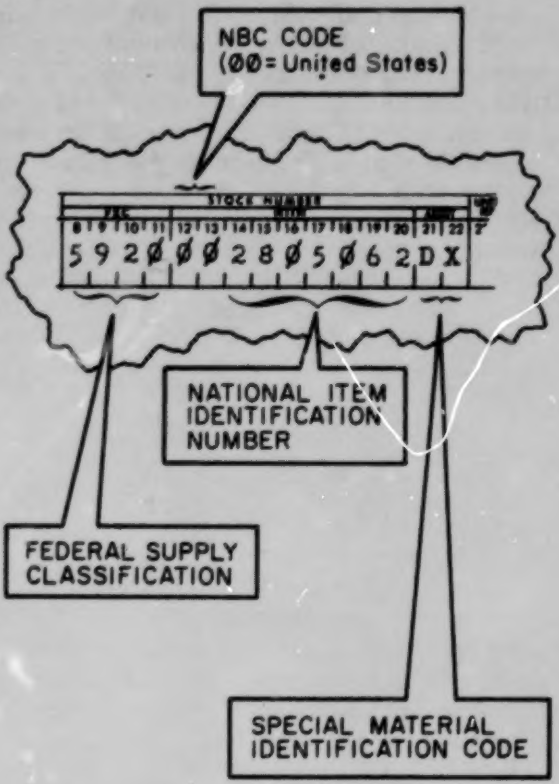
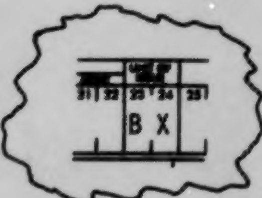

NBC CODE
(00= United States)
STOCK NUMBER
FSC
NIIN
8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
5 9 2 0 0 0 2 8 0 5 0 6 2 D X
NATIONAL ITEM IDENTIFICATION NUMBER
FEDERAL SUPPLY CLASSIFICATION
SPECIAL MATERIAL IDENTIFICATION CODE

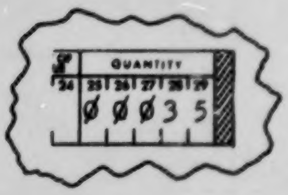
Figure 12-4.—Data block with stock number—1 information.

When requisitioning items that can be identified only by a part number or by a local item control number, use the DD 1348-6 that is discussed later in this chapter.

CCs 23-24, UNIT OF ISSUE.—Enter the two-letter unit of issue abbreviation for the item being requisitioned. For example, if the unit of issue for the item requisitioned is box, enter BX in CCs 23-24 as shown here.



CCs 25-29, QUANTITY.—Enter the quantity of the item required. If the quantity exceeds 99,999, submit additional requisitions for the remainder of the order. When the item requisitioned is required in a minimum length, size, or other requirement that cannot be covered by an advice code, enter the specific requirement (for example, minimum length acceptable 10 ft) in the REMARKS block and identify the requisition as containing exception data by entering A05 or A0E in CCs 1-3. Also, when the total requirement of an item involves two or more urgencies of need (for example, immediate use and routine stock replenishment), prepare separate requisitions for the partial quantities of the total requirement. When the requested quantity does not require five significant digits, enter zeros in the blank spaces preceding the significant digits as shown below.



Requisitions that will result in multiple receipts of materiel or services, such as continuing and annual requirements for gasoline, telephone service, or laundry, must indicate "C9999" in CCs 25-29.

CCs 30-43, DOCUMENT NUMBER.—The document number includes the SDC, the requisitioner's UIC, the Julian date of the requisition, and the serial number of the requisition as explained below:

CC 30, SDC.—This one-letter code identifies the service or component of the service. Navy codes are as follows:

R—Fleet operating units of CINCPACFLT

V—Fleet operating units of CINCLANTFLT

N—All activities other than fleet operating units of CINCPACFLT/CINCLANTFLT

CCs 31-35, REQUISITIONER.—This is the UIC of the ship or activity. If the number is less than five digits, it is preceded by zeros.

CCs 36-39, DATE.—Enter the four digits representing the Julian date on which the requisition is actually transmitted to the supply source. The first position represents the last digit of the calendar year. The last three positions indicate the numeric consecutive day of the calendar year. For example, 7299 represents 26 Oct 77. The numeric consecutive day of the calendar year is on all Government calendar pads.

CCs 40-43, SERIAL.—Enter a four-position serial number. The first position of the serial number may be a numeric 0 through 9 or an alphabetic A through G, or W; however, use only G or W on NORS requisitions. The remaining three positions of the serial number is numeric 001 through 999.

Blocks of serial numbers may be assigned to various shipboard departments or to specific commodities of materiel. However, serial numbers in the 9700-9999 series are used only in requisitions for ship's store items, including retail clothing.

NOTE: Since the document numbers initially assigned by requisitioners are perpetuated on all subsequent supply and financial documents, under no circumstances may you assign a duplicate serial number on the same day.

CC 44, DEMAND.—The demand code is a mandatory entry of a single alphabetic character and is assigned as follows:

- R RECURRING DEMAND—all requisitions except those for which demand code "N" or "O" is applicable.

- N NONRECURRING DEMAND—all requisitions for:

  - Initial allowances.

  - Increase in range or depth based on demand or changes in allowance list or load list quantities.

  - Materiel for space or equipment alterations, for example, modernization, retrofit, ordnance alterations (ORDALTs), special projection alterations (SPALTs), and other materiel requests clearly identified as one-time requirements.

- O NO DEMAND—Requisitions for substitute items that can be supplied more readily than preferred items that have been requisitioned previously and are still desired when available.

In selecting demand codes, remember that inventory managers rely upon demand codes (specifically demand code "R") to determine which items they will invest procurement funds to ensure their continual availability. Requisitioners must not use the recurring demand code "R" indiscriminately. Use the demand code "N" when the requirement clearly meets any of the criteria listed for nonrecurring demands.

Two separate requisitions (one coded "R" and one coded "N") may be necessary to satisfy a single requirement. For example, if the on-hand stock of an item is -3, the current requisitioning objective is 6, and an increased requisitioning objective of 12 is authorized as a result of increased demand history, you must code one requisition for the original deficiency of 3 as "R". Code the other requisition for the increase of 6 in the new requisitioning objective as "N."

CCs 45-50, SUPPLEMENTARY ADDRESS.—When using the supplementary address field as a "Ship to" or "Bill to" address, enter the appropriate service code and UIC in CCs 45-50. When materiel is to be shipped and billed to the requisitioner, use CCs 45-50 for local information, such as a stowage location, a work center code, and a controlled equipage custody record number. When local information is entered in CCs 46-50, make sure CC 45 always contains a "Y."

In requisitions for not carried (NC) materiel other than controlled equipage and selected item management (SIM) direct turnover (DTO) items, enter "N" in CC 46 and the requester's work center code in CCs 47-50. In requisitions for not in stock (NIS) materiel and SIM-DTO items, enter "S" in CC 46 to signify that a stock record is maintained and the requester's work center code in CCs 47-50.

In requisitions for controlled equipage items, enter "E" in CC 46 and the appropriate equipage custody card number in CCs 47-50. Enter one of the following appropriate alpha codes in CC 47 to identify the requesting department:

Air	V
Communications	C
Deck	D
Engineering	E
Embarked Staff	F
Executive	X
Medical/Dental	M
Navigation	N
Operations	O
Reactor	R
Supply	S
Weapons	W

In requisitions for equipage items other than controlled equipage, enter "E" in CC 46 and the requester's work center code in CCs 47-50.

CC 51, SIGNAL.—This is a single alphabetic code that designates the activity to receive the materiel (ship to) and the activity to be charged for the issue (bill to).

- When materiel is to be shipped to the requisitioner (CCs 31-35):

A—Bill the requisitioner.

B—Bill the supplementary addressee (CCs 46-50).

D—Use no billing required (free issue) for fleet units when requisitioning materiel identified by cognizance symbols 0I and 0P (publications) or 0A and 8A (nuclear ordnance items).

- When materiel is to be shipped to the supplementary address (CCs 46-50):

J—Bill the requisitioner.

K—Bill the supplementary addressee.

M—Use no billing required (free issue) for fleet units to indicate items with signal code "D."

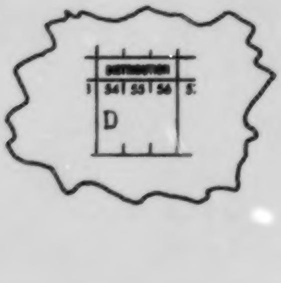
NOTE 1: Requisitioner may use "Y" and local code only with signal codes "A" or "D."

NOTE 2: Do not use "D" or "M" when requisitioning Appropriation Purchases Account materiel since such materiel is charged for statistical purposes even though operating funds are not affected. If there are accounting instructions that cannot be covered by the signal and fund codes, write them in the REMARKS field (data blocks L through V). In this instance, use document identifier A05 or A0E.

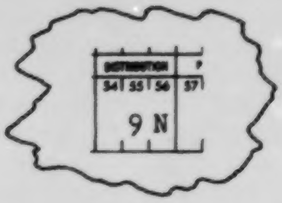
CCs 52-53, FUND CODE.—Enter the applicable two-character fund code (see NAVSO P-3013, app II) on all requisitions except for free issues that are identified by a signal code "D" or "M" entered in CC 51. Leave the fund code field blank on a free issue requisition.

CCs 54-56, DISTRIBUTION.—The distribution field of a requisition is a dual-purpose field with two different uses for the Navy Supply System. The first position indicates a monitoring activity; the other two indicate the cognizance symbol.

Monitoring Activity—When an entry is made in CC 54 of the distribution field, it will represent a specific monitoring activity (see NAVSUP P-485, app 3) that is to receive 100% supply and shipment status. Such status is in addition to that provided the requisitioner or supplementary addressee by the M&S code assigned in CC 7. For example, if the USS *John Paul Jones* (DDG-32), while deployed in the Pacific, initiates an issue group one requisition, enter "D" in CC 54 to designate Special Programs Section, NSC Oakland, as the monitoring activity that is shown below.



Cognizance Symbol—The cognizance symbol entry is the two-character numeric and alpha code prefixed to NSNs as listed in the NMDL, allowance list, or other source if assigned. The first character of the symbol indicates the stores account and is entered in CC 55 of the distribution field. Odd numbers specify Navy Stock Account (NSA) materiel, and even numbers specify either Appropriation Purchases Account (APA) materiel or nonstores account materiel. The second character of the symbol indicates the cognizant inventory manager and is entered in CC 56. For example, if the cognizance symbol is "9N," it appears in the distribution field as illustrated here.



When the cognizance symbol is not known and the fund code cited does not signify a charge to an allotment under the NSF, leave CCs 55-56 blank. If the fund code cited signifies a charge to an allotment under the NSF, enter a cognizance symbol compatible with the fund code. For example, a USS *John Paul Jones* (DDG-32) requisition citing fund code "NR," for a machinery repair part that cannot be identified to a NSN, does not require you to enter a cognizance symbol in the distribution field. However, a USS *Puget Sound* (AD-38) requisition citing fund code "CZ" for the same item would have the cognizance symbol entry "1H" in CCs 55-56. Entries would appear as shown in figure 12-5.

CCs 57-59, PROJECT.—The project code is a mandatory three-character entry (fig. 12-6) used to identify the purpose of the requirement. These codes are recognized throughout the distribution system and assist the supplier in determining the appropriate method of handling and marking of shipments. The third position of the project code may be used to provide the sixth

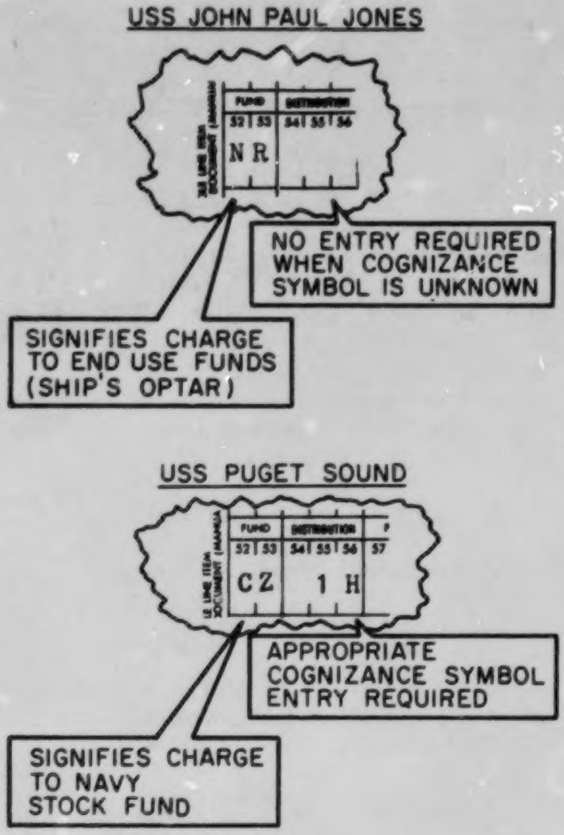

USS JOHN PAUL JONES
FUND
DISTRIBUTION
52 53
54 55 56
N R
NO ENTRY REQUIRED WHEN COGNIZANCE SYMBOL IS UNKNOWN
SIGNIFIES CHARGE TO END USE FUNDS (SHIP'S OPTAR)
USS PUGET SOUND
FUND
DISTRIBUTION
52 53
54 55 56
57
C Z
1 H
APPROPRIATE COGNIZANCE SYMBOL ENTRY REQUIRED
SIGNIFIES CHARGE TO NAVY STOCK FUND

Figure 12-5.—Data blocks illustrating cognizance symbols for fund codes NR and CZ.

digit of a storage location if needed. See appendix 6 of NAVSUP P-485 for a complete listing of codes.

CCs 60-61, PRIORITY.—This is a numeric code assigned by the requisitioner that indicates the mission of the requisitioner and the urgency of need for the materiel. The IPD is assigned according to the procedures explained earlier in this chapter.

CCs 62-64, REQUIRED DELIVERY DATE.—The standard delivery date for the assigned IPD is normally the required delivery date. Therefore, enter no required delivery date in CCs 62-64 except under conditions explained in NAVSUP P-485.

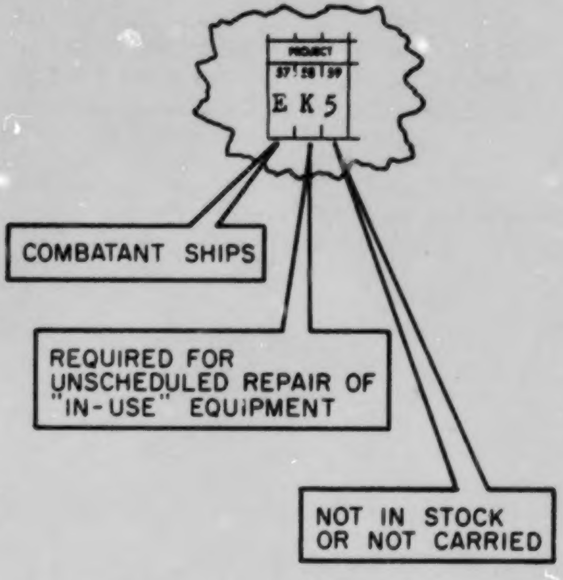

PROJECT
57 58 59
E K 5
COMBATANT SHIPS
REQUIRED FOR UNSCHEDULED REPAIR OF "IN-USE" EQUIPMENT
NOT IN STOCK OR NOT CARRIED

Figure 12-6.—Data block with project code entry.

DATA BLOCKS G, H, I, J, AND K, STATUS DATA.—Leave these blocks blank.

CCs 65-66, ADVICE.—The advice code is used to provide the required information to the supplier. Figure 12-7 explains how to use advice code 5A.

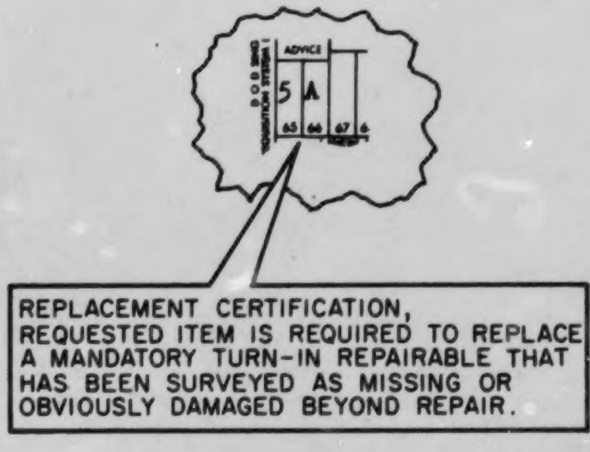
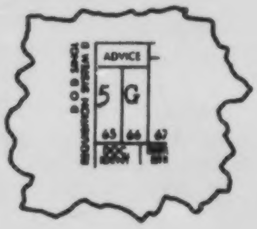
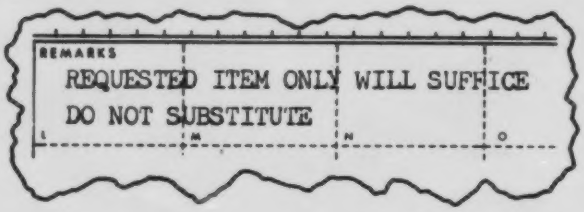

ADVICE
5 A
65 66 67
REPLACEMENT CERTIFICATION, REQUESTED ITEM IS REQUIRED TO REPLACE A MANDATORY TURN-IN REPAIRABLE THAT HAS BEEN SURVEYED AS MISSING OR OBVIOUSLY DAMAGED BEYOND REPAIR.

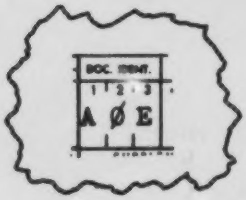
Figure 12-7.—Data block with explanation of advice code 5A.

All requisitions for mandatory turn-in repairables (MTRs) must contain the proper advice code (5A, 5D, 5G, 5S, or 5X) in CCs 65-66. These advice codes have special significance for MTRs and take precedence over any other advice code. Any other advice code must be entered in the REMARKS block of the requisition and a document identifier of A05 or A0E is entered in CCs 1-3.


ADVICE
5
G
65
66
67


REMARKS
L
M
N
O

REQUESTED ITEM ONLY WILL SUFFICE
DO NOT SUBSTITUTE


DOC. IDENT.
1 2 3
A 0 E

For afloat medical departments, use advice code 2-G when ordering 6505 items. Although MILSTRIP permits only one advice code, use the exception type requisition (document identifier code A05 or A0E in CCs 1-3) to make an advice entry in the REMARKS space. The 2-G code is used to obtain small quantities of AMAL items with the most distant expiration dates. If materiel is still received with an unacceptable remaining shelf life, submit an SF 364, Item Discrepancy, under NAVSUPINST 4440.127.

DATA BLOCK L-V, REMARKS.—These blocks are used to convey the necessary exception data pertinent to the processing of the requisition by the supply activity. When exception data is entered in the REMARKS block, enter document identifier code A05 or A0E in CCs 1-3. Use exception data only when required because document identifier A05 or A0E prevents automatic processing of the requisition by computerized supply activities. Exception data is usually limited to the following:

- Special funding instructions
- An additional advice code, if required, when advice code 5A, 5D, 5G, 5S, or 5X is entered in CCs 65-66
- Authorization for the item when requirement is imposed by higher authority, such as TYCOM and systems command
- Essential "Mark for" address
- "Ship to" or "Bill to" address when it cannot be designated by a coded entry in CCs 30-43 (requisitioner) or CCs 45-50 (supplementary address)

Distribution

DD 1348 (4-part form) is normally used to requisition materiel from ashore supply activities. The 6-part form is normally used when requesting materiel from other ships. DD 1348 is usually prepared and distributed by nonautomated ships as shown in table 12-1.

NON-NSN REQUISITION DOCUMENT, DD 1348-6

DD 1348-6 is used to requisition materiel that cannot be identified by an NSN, a NATO stock number, or an NICN (other than a permanent

Table 12-1.—Distribution of DD 1348

ORIGINAL	To issuing ship or ashore supply activity.
GREEN COPY	To OPTAR recordkeeper for filing OPTAR document file No. 1 if requisition is for OPTAR chargeable materiel; otherwise, destroy after posting to the Requisition/OPTAR log.
PINK COPY	To stock records storekeeper if a procurement action tickler file is maintained; otherwise discard.
YELLOW COPY (6-part form only)	To issuing ship.
WHITE COPY (6-part form only)	To issuing ship. Returned with materiel. Receipt and return to issuing ship when requested; otherwise discard.
HARDBACK COPY	To materiel outstanding file (MOF).

"LL" coded NICN). The form is illustrated in figure 12-8. The upper portion includes nine data blocks for additional identification data. Table 12-2 provides CC and data block entries with explanations. Table 12-3 shows its distribution.

DD 1149

The Requisition and Invoice/Shipping Document, DD 1149, is used as the procurement document for the items excluded from MILSTRIP. It is shown in figure 12-9.

The requisition number and priority are assigned in the same way as for the MILSTRIP requisition. However, when more than one item is being ordered, show only the UIC and Julian date in data block 6. A separate serial number is assigned to each item on the requisition (fig. 12-9). A requisition for bulk fuel or bulk lube oil may include only one item on each DD 1149. Figure 12-10 illustrates a requisition for petroleum products.

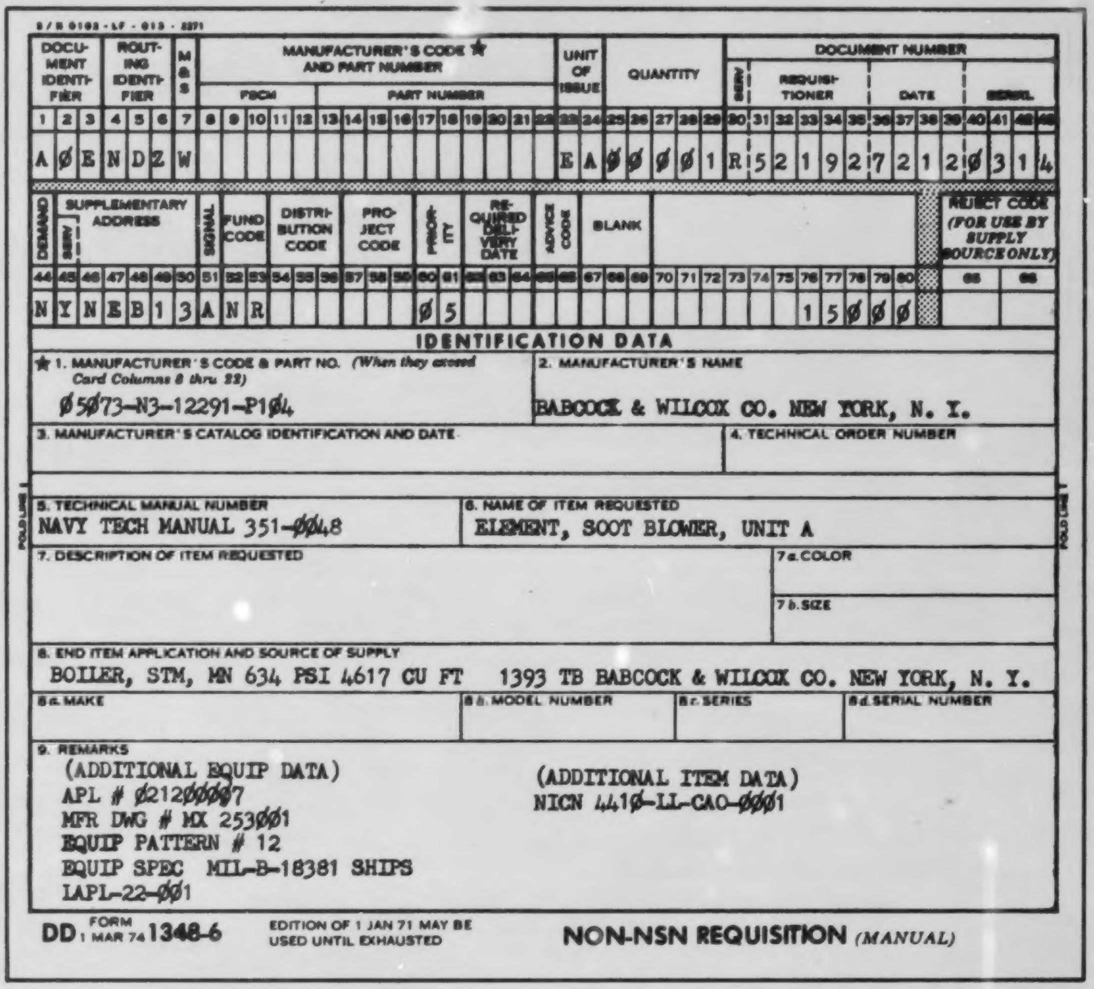
On DD 1149s for materiel other than bulk petroleum products, enter "FUND CODE" and the appropriate fund code in data block 4.

LETTER REQUESTS AND MESSAGE REQUISITIONS

Certain materiel and situations may require procurement by letter or message instead of by requisition. There is little difference in the three types of procurement except in form. The request must still convey to the supplying and approving activities the accounting and descriptive data necessary to process the transaction.

Letter Requests

You, as a medical supply person, must try to keep letter requests to a minimum. Use these



S/N 0102-LF-013-3371

DOCUMENT IDENTIFIER	ROUTING IDENTIFIER	M & S	MANUFACTURER'S CODE ★ AND PART NUMBER: FSCM	MANUFACTURER'S CODE ★ AND PART NUMBER: PART NUMBER	UNIT OF ISSUE	QUANTITY	DOCUMENT NUMBER: SERV	DOCUMENT NUMBER: REQUISITIONER	DOCUMENT NUMBER: DATE	DOCUMENT NUMBER: SERIAL
1 2 3	4 5 6	7	8 9 10 11 12	13 14 15 16 17 18 19 20 21 22	23 24	25 26 27 28 29	30	31 32 33 34 35	36 37 38 39	40 41 42 43
A 0 E	N D Z	W			E A	0 0 0 0 1	R	5 2 1 9 2	7 2 1 2	0 3 1 4

DEMAND	SUPPLEMENTARY ADDRESS: SERV	SUPPLEMENTARY ADDRESS	SIGNAL	FUND CODE	DISTRIBUTION CODE	PROJECT CODE	PRIORITY	REQUIRED DELIVERY DATE	ADVICE CODE	BLANK		REJECT CODE (FOR USE BY SUPPLY SOURCE ONLY)	
44	45	46 47 48 49 50	51	52 53	54 55 56	57 58 59	60 61	62 63 64	65 66	67 68 69	70 71 72 73 74 75 76 77 78 79 80	65	66
N	Y	N E B 1 3	A	N R			0 5				1 5 0 0 0		

IDENTIFICATION DATA

★ 1. MANUFACTURER'S CODE & PART NO. *(When they exceed Card Columns 8 thru 22)*
05073-N3-12291-P104

2. MANUFACTURER'S NAME
BABCOCK & WILCOX CO. NEW YORK, N. Y.

3. MANUFACTURER'S CATALOG IDENTIFICATION AND DATE

4. TECHNICAL ORDER NUMBER

FOLD LINE

5. TECHNICAL MANUAL NUMBER
NAVY TECH MANUAL 351-0048

6. NAME OF ITEM REQUESTED
ELEMENT, SOOT BLOWER, UNIT A

7. DESCRIPTION OF ITEM REQUESTED

7a. COLOR

7b. SIZE

8. END ITEM APPLICATION AND SOURCE OF SUPPLY
BOILER, STM, MN 634 PSI 4617 CU FT 1393 TB BABCOCK & WILCOX CO. NEW YORK, N. Y.

8a. MAKE

8b. MODEL NUMBER

8c. SERIES

8d. SERIAL NUMBER

9. REMARKS
(ADDITIONAL EQUIP DATA)
APL # 021200007
MFR DWG # MX 253001
EQUIP PATTERN # 12
EQUIP SPEC MIL-B-18381 SHIPS
IAPL-22-001

(ADDITIONAL ITEM DATA)
NICN 4410-LL-CAO-0001

DD FORM 1 MAR 74 1348-6 EDITION OF 1 JAN 71 MAY BE USED UNTIL EXHAUSTED

NON-NSN REQUISITION *(MANUAL)*

NOTE: DD FORM 1348-6 IS A 6-PART SNAP OUT FORM WITH MULTICOLORED INTERLEAVED COPIES. IT IS PERFORATED AT FOLD LINE TO PERMIT FOLDING TO SIZE OF A REQUISITION.

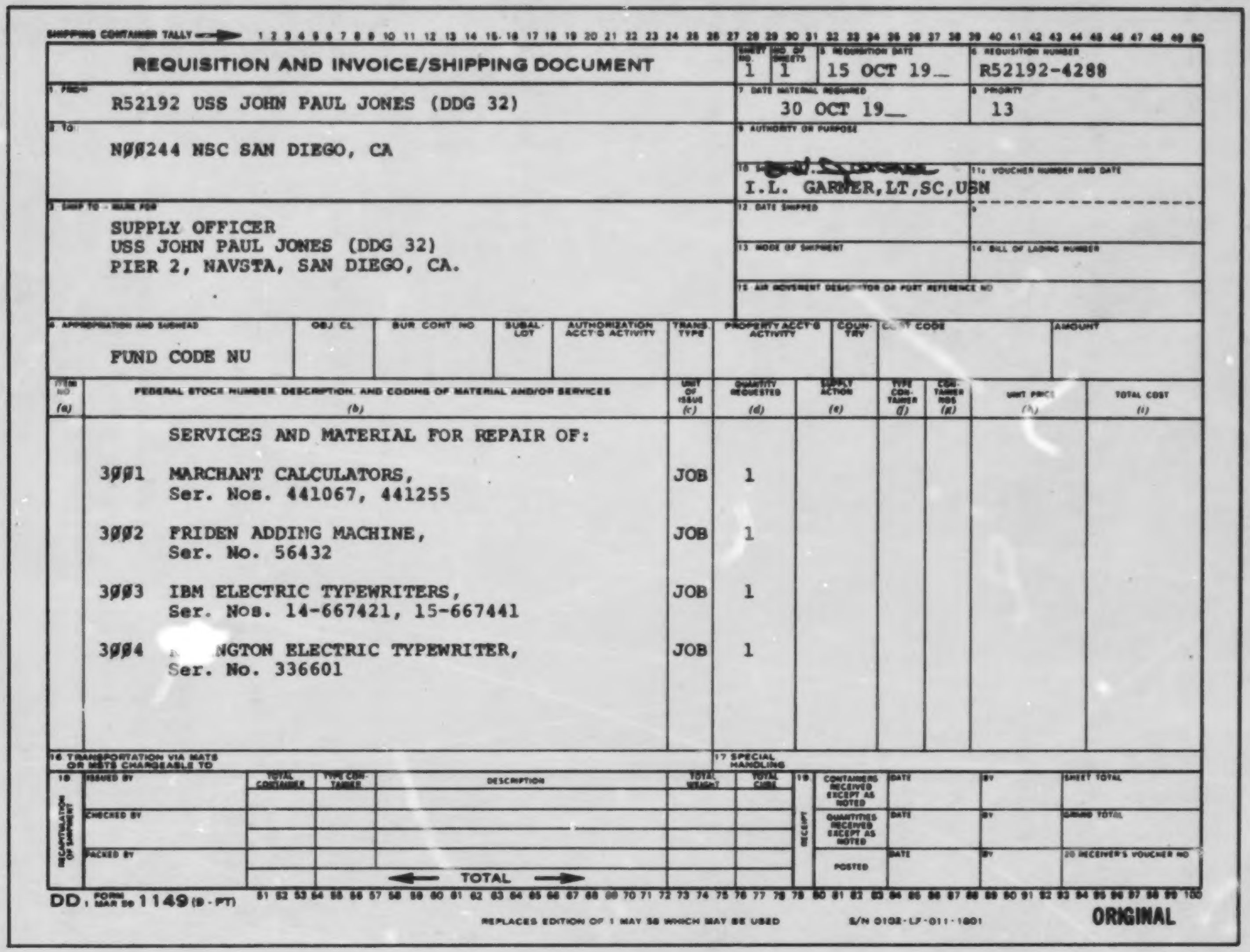
43.24.6

Figure 12-8.—Non-NSN Requisition, DD Form 1348-6.

requests when it is necessary to discuss the materiel requirement or when the cognizant command or bureau requires a letter format. Assign each item of materiel listed in a letter request a separate requisition number in the regular MILSTRIP series and format. Also, specify the authorized priority designator and appropriate fund code or accounting data.

Message Requisitions

In certain situations, you will have to procure urgent materiel requirements by message rather than by submitting standard requisition documents. Submit message requisitions in a specified format, and make sure they convey the same data required on DD 1348, DD 1348-6, or NAVSUP 1250-1.



SHIPPING CONTAINER TALLY → 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

REQUISITION AND INVOICE/SHIPPING DOCUMENT

SHEET NO. 1
NO. OF SHEETS 1
5 REQUISITION DATE 15 OCT 19__
6 REQUISITION NUMBER R52192-4288
1 FROM R52192 USS JOHN PAUL JONES (DDG 32)
7 DATE MATERIAL REQUIRED 30 OCT 19__
8 PRIORITY 13
2 TO N00244 NSC SAN DIEGO, CA
9 AUTHORITY OR PURPOSE
10 SIGNATURE I.L. GARNER,LT,SC,USN
11a VOUCHER NUMBER AND DATE
b
3 SHIP TO - MARK FOR
SUPPLY OFFICER
USS JOHN PAUL JONES (DDG 32)
PIER 2, NAVSTA, SAN DIEGO, CA.
12 DATE SHIPPED
13 MODE OF SHIPMENT
14 BILL OF LADING NUMBER
15 AIR MOVEMENT DESIGNATOR OR PORT REFERENCE NO

4 APPROPRIATION AND SUBHEAD	OBJ CL	BUR CONT NO	SUBAL-LOT	AUTHORIZATION ACCT'G ACTIVITY	TRANS. TYPE	PROPERTY ACCT'G ACTIVITY	COUNTRY	COST CODE	AMOUNT
FUND CODE NU									

ITEM NO. (a)	FEDERAL STOCK NUMBER, DESCRIPTION, AND CODING OF MATERIAL AND/OR SERVICES (b)	UNIT OF ISSUE (c)	QUANTITY REQUESTED (d)	SUPPLY ACTION (e)	TYPE CONTAINER (f)	CONTAINER NOS (g)	UNIT PRICE (h)	TOTAL COST (i)
	SERVICES AND MATERIAL FOR REPAIR OF:							
	3001 MARCHANT CALCULATORS, Ser. Nos. 441067, 441255	JOB	1					
	3002 FRIDEN ADDING MACHINE, Ser. No. 56432	JOB	1					
	3003 IBM ELECTRIC TYPEWRITERS, Ser. Nos. 14-667421, 15-667441	JOB	1					
	3004 [illegible]NGTON ELECTRIC TYPEWRITER, Ser. No. 336601	JOB	1					

16 TRANSPORTATION VIA MATS OR MSTS CHARGEABLE TO
17 SPECIAL HANDLING

18 RECAPITULATION OF SHIPMENT	TOTAL CONTAINER	TYPE CONTAINER	DESCRIPTION	TOTAL WEIGHT	TOTAL CUBE	19 RECEIPT				
ISSUED BY							CONTAINERS RECEIVED EXCEPT AS NOTED	DATE	BY	SHEET TOTAL
CHECKED BY							QUANTITIES RECEIVED EXCEPT AS NOTED	DATE	BY	GRAND TOTAL
PACKED BY			← TOTAL →				POSTED	DATE	BY	20 RECEIVER'S VOUCHER NO

DD FORM 1 MAR 59 1149 (9-PT) 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

REPLACES EDITION OF 1 MAY 58 WHICH MAY BE USED S/N 0102-LF-011-1801

ORIGINAL

43.3

Figure 12-9.—Requisition and Invoice/Shipping Document, DD Form 1149 (Multiple Requests).

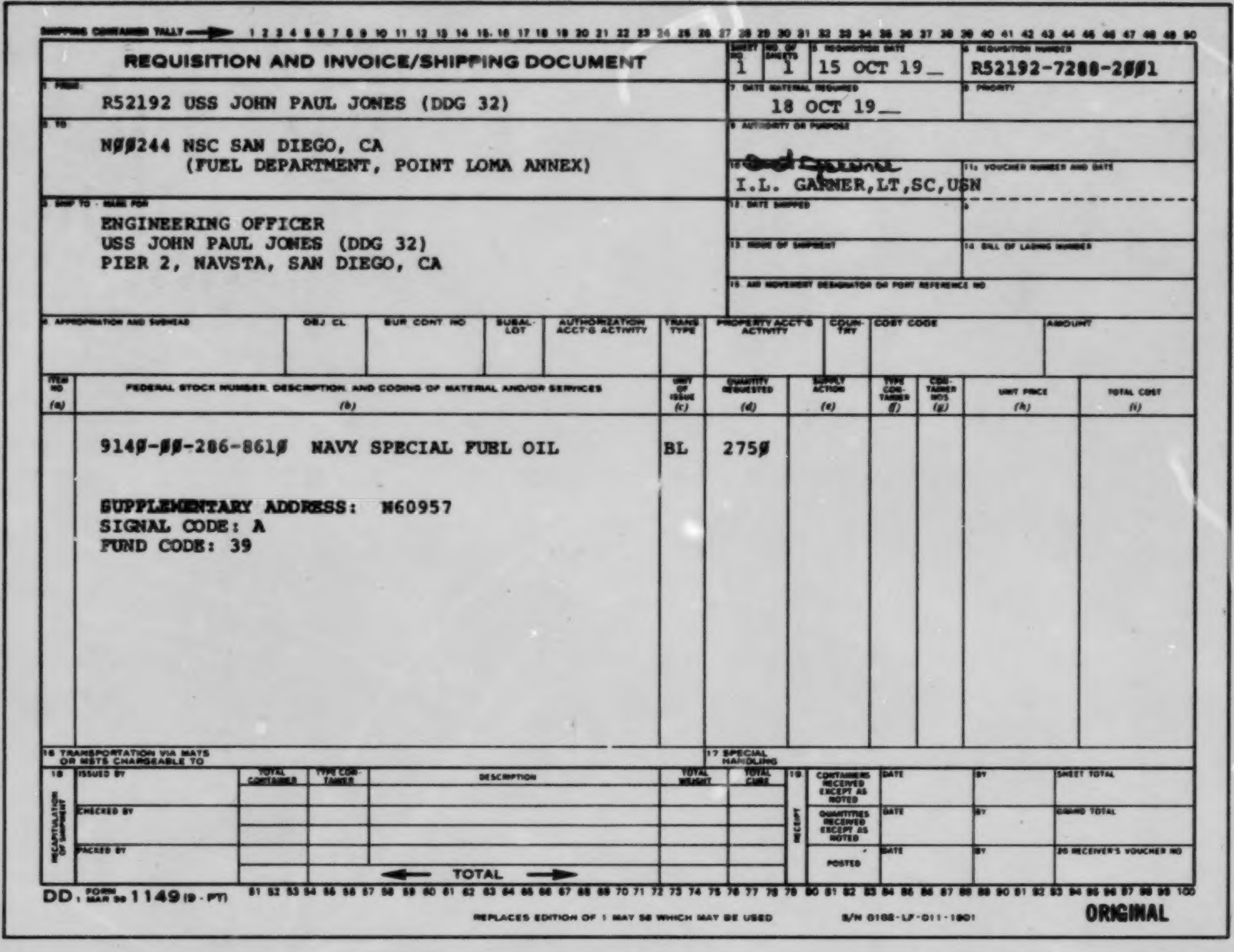
Table 12-2.—Data Elements of DD 1348-6

Card Column	Field Legend	Explanation
1-3	Document Identifier	Enter document identifier A05 or A0E as appropriate.
4-6	Routing Identifier	Enter routing identifier of stock point to whom requisition is sent.
7	M&S	Enter applicable code.
8-22	Manufacturer's Code and Part Number	Enter Federal Supply Code for Manufacturers (FSCM) and part number. If FSCM and part number exceed 15 positions, enter FSCM and entire part number in data block 1 of "Identification Data" (ID) section. If only FSCM or part number is known, leave CCs 8-22 blank, and enter FSCM or part number in data block 1 of ID section.
23-24	Unit of Issue	Enter two-position alphabetical unit of issue for item requisitioned.
25-29	Quantity	Enter requested quantity.
30-35	Requisitioner	Enter SDC and UIC of chargeable activity for which materiel is being requisitioned.
36-39	Date	Enter Julian date on which request is submitted.
40-43	Serial	Enter serial number on request.
44	Demand	Enter demand code.
45-50	Supplementary Address	(1) Enter SDC and UIC of "Ship to/Bill to" activity or; (2) Enter "Y" and local control code when desired or; (3) Leave blank.
51	Signal	Enter signal code.
52-53	Fund Code	Enter fund code.
54	Distribution Code	Enter monitoring activity code, if applicable, otherwise leave blank.
55-56		Leave blank.
57-59	Project Code	Enter project code, if applicable.
60-61	Priority	Enter authorized priority designator.

Table 12-2.—Data Elements of DD 1348-6—Continued

Card Column	Field Legend	Explanation
62-64	Required Delivery Date	Enter date according to priority and need, if appropriate.
65-66	Advice Code	Enter code or leave blank.
67-69	Blank	Leave blank.
74-80	Extended Price	Enter total estimated price.

Identification Data block	Explanation
1	Enter the FSCM and part No. of the item requested when both the FSCM and complete part No. cannot be included in CCs 8-22. When only the FSCM is known, line out "Part No.," and enter the FSCM. When only the part No. is known, line out "Manufacturer's Code To," and enter the part No. When an entry is included in data block 1, leave CCs 8-22 blank.
2	In addition to manufacturer's name, enter the address, if available.
3	Enter the title, edition, and page No. of the manufacturer's catalog in which the item is described.
4	Enter the name of the issuing office, number, and date of any technical order, note, or bulletin that will assist in identifying the item.
5	Enter the title, edition, and page No. of any Navy or manufacturer's technical manual that will assist in identifying the item.
6	Enter the noun name of the item requested.
7	Enter a detailed description of the item, OTHER than the information required in blocks 6, 7a, and 7b. (If requesting electronic or ordnance items, include the circuit symbol number, if applicable.)
8	Enter the noun name of the component or equipment (preferably the component) in which the requested item is used and the name of the manufacturer of the component or equipment.
8a-d	Enter the make (or type) and the other required data.
9	Enter any additional technical information that will assist in positive identification of the item. This includes the applicable APL and CID Nos., EIC No., drawing No., piece No., service application, contract No., military specification No., and any component or equipment nameplate data not included in blocks 8 through 8d. When a component is indicated in block 8 instead of equipment, enter a brief description of the next higher assembly or the parent equipment in this block. If the requested item can also be identified by a permanent "LL" coded NICN, enter the NICN under a typed "ADDITIONAL ITEM DATA" caption. When a fund code is not assigned to enter in CCs 52-53, enter complete accounting data to procure the item.



REQUISITION AND INVOICE/SHIPPING DOCUMENT

SHEET NO	1
NO. OF SHEETS	1
REQUISITION DATE	15 OCT 19__
REQUISITION NUMBER	R52192-7288-2001
FROM	R52192 USS JOHN PAUL JONES (DDG 32)
DATE MATERIAL REQUIRED	18 OCT 19__
TO	N00244 NSC SAN DIEGO, CA (FUEL DEPARTMENT, POINT LOMA ANNEX)
10	I.L. GARNER,LT,SC,USN
SHIP TO - MARK FOR	ENGINEERING OFFICER USS JOHN PAUL JONES (DDG 32) PIER 2, NAVSTA, SAN DIEGO, CA

ITEM NO (a)	FEDERAL STOCK NUMBER, DESCRIPTION, AND CODING OF MATERIAL AND/OR SERVICES (b)	UNIT OF ISSUE (c)	QUANTITY REQUESTED (d)	SUPPLY ACTION (e)	TYPE CONTAINER (f)	CONTAINER NOS (g)	UNIT PRICE (h)	TOTAL COST (i)
	9140-00-286-8610 NAVY SPECIAL FUEL OIL	BL	2750					
	SUPPLEMENTARY ADDRESS: N60957 SIGNAL CODE: A FUND CODE: 39							

DD FORM 1 MAR 59 1149 (9-PT)

REPLACES EDITION OF 1 MAY 58 WHICH MAY BE USED

S/N 0102-LF-011-1901

ORIGINAL

43.3

Figure 12-10.—Requisition and Invoice/Shipping Document, DD Form 1149 (Petroleum Products).

Table 12-3.—Distribution of DD 1348-6

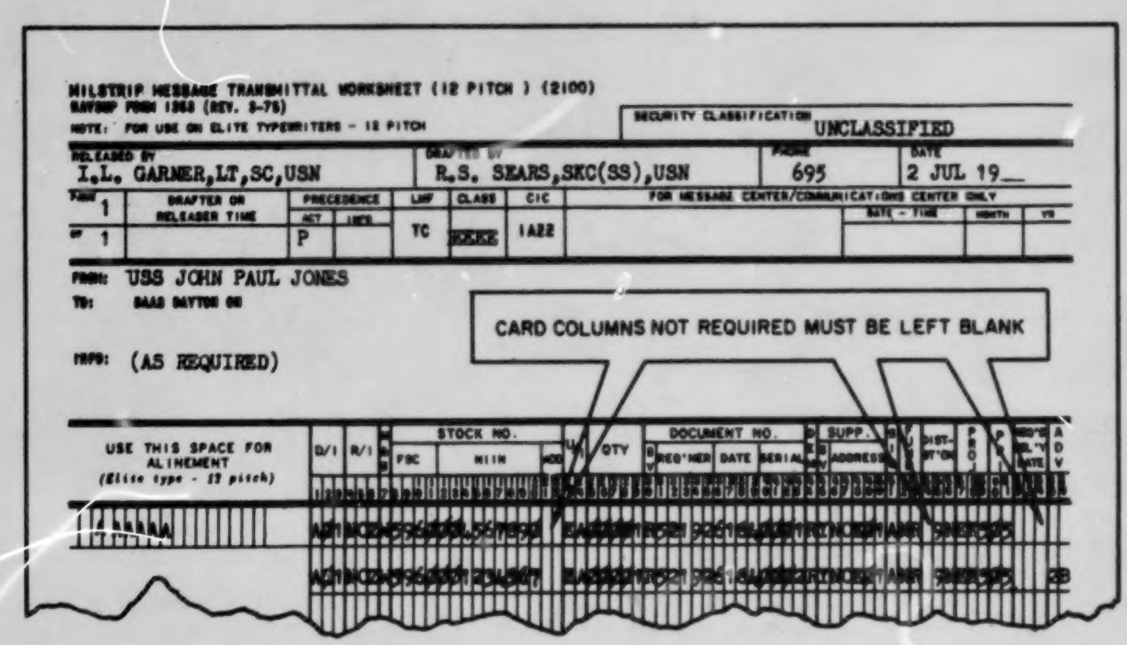
ORIGINAL	To ashore supply activity.
GREEN COPY	To OPTAR recordkeeper for filing in OPTAR document file No. 1.
PINK COPY	To MOF.
YELLOW COPY	To ashore supply activity (with original).
1st WHITE COPY	Attach to the pink copy of the NAVSUP 1250 to be returned to the requesting department with the departmental budget report (optional).
2nd WHITE COPY	Attach to the hardback copy of the NAVSUP 1250 to be filed in the historical demand file (HDF), or discard if HDF is not maintained.

Fleet units use message requisitions for priority 01-08 requisitions unless they can be transmitted more expediently by other means. Fleet units also use messages for priority 09-15 requisitions when transmission by airmail will not result in delivery of the requisitioned materiel by the required time. When a message requisition is prepared, submit a DD 1348, DD 1348-6, or NAVSUP 1250-1 for each item requested in the message. Since the message replaces the original form, discard the original of each DD 1348, DD 1348-6, or the original and white copy of the NAVSUP 1250-1, and distribute the remaining copies by the established procedures.

When materiel is authorized to be requisitioned by message and no exception data is required, prepare message requisitions for NSN and NICN items for transmittal through the Defense Automatic Addressing System (DAAS). DAAS is a real-time random access digital computer system that uses the Automatic Digital Network (AUTODIN) switching centers of the Defense Communications System to receive and automatically retransmit MILSTRIP messages to the proper addressees. An input message to DAAS may include multiple requisitions, followups, requisition modifiers, and cancellation requests, provided that each document included in the message is limited to 66 CCs of data as illustrated in figure 12-11.

Prepare message requisitions for non-NSN and NICN items or items requiring exception data as shown in figure 12-12. Submit these requisitions in MILSTRIP format; separate data elements by slants (/); and identify data elements that are not applicable by "BLNK."

A message requisition for non-NSN and NICN items may contain no more than seven



MILSTRIP MESSAGE TRANSMITTAL WORKSHEET (12 PITCH) (2100)
NAVSUP FORM 1368 (REV. 3-75)
NOTE: FOR USE ON ELITE TYPEWRITERS - 12 PITCH

SECURITY CLASSIFICATION UNCLASSIFIED

RELEASED BY	DRAFTED BY	PHONE	DATE
I.L. GARNER,LT,SC,USN	R.S. SEARS,SKC(SS),USN	695	2 JUL 19__

PAGE	DRAFTER OR RELEASER TIME	PRECEDENCE ACT	PRECEDENCE INFO	LMF	CLASS	CIC	FOR MESSAGE CENTER/COMMUNICATIONS CENTER ONLY	DATE - TIME	MONTH	YR
1 OF 1		P		TC	EEEE	IA22				

FROM: USS JOHN PAUL JONES
TO: DAAS DAYTON OH
INFO: (AS REQUIRED)

CARD COLUMNS NOT REQUIRED MUST BE LEFT BLANK

USE THIS SPACE FOR ALINEMENT
(Elite type - 12 pitch)

123.177

Figure 12-11.—Naval message draft (DAAS) requisition.

requisitions, and they must have the same routing identifier. For detailed instructions on message requisitions, see NAVSUP P-485.

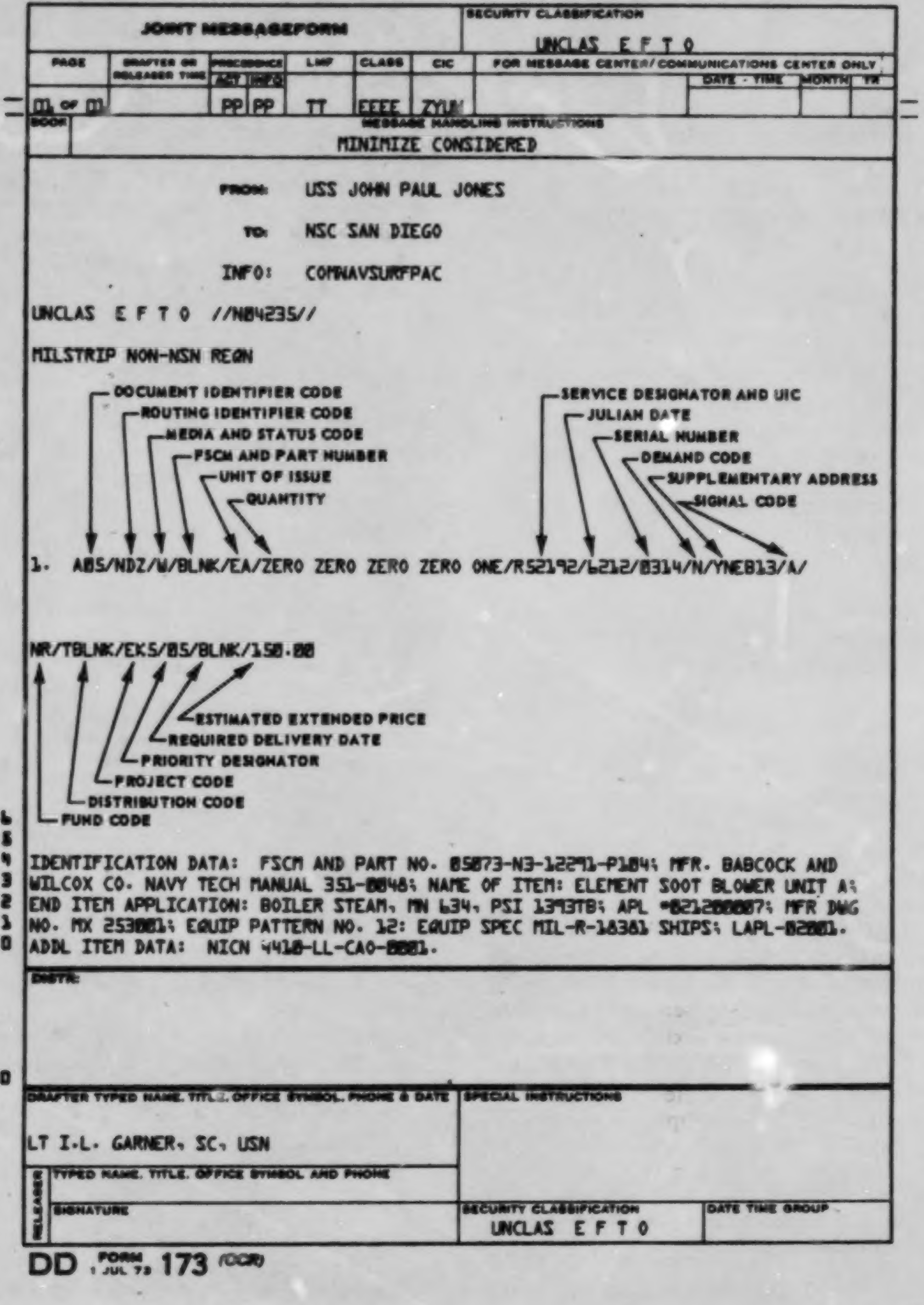
PURCHASE

Purchase actions are normally taken by a shore activity as a result of ships' requisitions. However, ships' supply officers and commanding officers of ships without Supply Corps officers may get emergency supplies or services by purchasing them on the open market when all of the following conditions exist:

- There is an immediate and urgent requirement for authorized supplies or services.
- The supplies or services are not available at the local supply activity.
- Time is of the essence and scheduled operations will not permit procurement through Navy shore-based purchasing activities. Other purchase restrictions may be imposed by the senior officer present afloat (SOPA), particularly in foreign ports.

When authorized by the TYCOM, the supply officer may make routine purchases of supplies and services when the value does not exceed $500 and all of the following conditions exist:

- The supplies or services are not available at the local supply support activity.
- Supply department complement is sufficient to handle the additional workload involved without detrimental effects.
- The supply officer is reasonably familiar with the local market area where the ship is located.
- All transactions are made by an approved small purchase method that provides for immediate delivery of the materiel.



JOINT MESSAGEFORM

SECURITY CLASSIFICATION UNCLAS E F T O

PAGE	DRAFTER OR RELEASER TIME	PRECEDENCE ACT	PRECEDENCE INFO	LMF	CLASS	CIC	FOR MESSAGE CENTER/COMMUNICATIONS CENTER ONLY	DATE - TIME	MONTH	YR
01 OF 01		PP	PP	TT	EEEE	ZYUW				

BOOK

MESSAGE HANDLING INSTRUCTIONS MINIMIZE CONSIDERED

FROM: USS JOHN PAUL JONES

TO: NSC SAN DIEGO

INFO: COMNAVSURFPAC

UNCLAS E F T O //N04235//

MILSTRIP NON-NSN REQN

1. A05/NDZ/W/BLNK/EA/ZERO ZERO ZERO ZERO ONE/R52192/6212/0314/N/YNE813/A/

NR/TBLNK/EK5/05/BLNK/150.00

DOCUMENT IDENTIFIER CODE
ROUTING IDENTIFIER CODE
MEDIA AND STATUS CODE
FSCM AND PART NUMBER
UNIT OF ISSUE
QUANTITY
SERVICE DESIGNATOR AND UIC
JULIAN DATE
SERIAL NUMBER
DEMAND CODE
SUPPLEMENTARY ADDRESS
SIGNAL CODE
ESTIMATED EXTENDED PRICE
REQUIRED DELIVERY DATE
PRIORITY DESIGNATOR
PROJECT CODE
DISTRIBUTION CODE
FUND CODE

IDENTIFICATION DATA: FSCM AND PART NO. 05073-N3-12291-P104; MFR. BABCOCK AND WILCOX CO. NAVY TECH MANUAL 351-0048; NAME OF ITEM: ELEMENT SOOT BLOWER UNIT A; END ITEM APPLICATION: BOILER STEAM, MN 634, PSI 1393TB; APL *021200007; MFR DWG NO. MX 253001; EQUIP PATTERN NO. 12: EQUIP SPEC MIL-R-18381 SHIPS; LAPL-02001. ADDL ITEM DATA: NICN 4410-LL-CA0-0001.

DISTR:

DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL, PHONE & DATE

LT I.L. GARNER, SC, USN

SPECIAL INSTRUCTIONS

RELEASER TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE

SIGNATURE

SECURITY CLASSIFICATION UNCLAS E F T O

DATE TIME GROUP

DD FORM 1 JUL 73 173 (OCR)

31.47(123)

Figure 12-12.—Naval Message Draft (Non-NSN) Requisition.

Restrictions

Activities afloat, either in the United States or foreign ports, may not purchase the following materiel without specific authority from the cognizant bureau or command:

- Materiel in excess of allowance except approved emergency requirements
- Boats
- Books for the ship's library
- Forms, commercial printing, binding, blank bookwork
- Technical ordnance articles
- Printing equipment and machinery
- Automotive equipment
- Transportation facilities, equipment, parts, and supplies required for domestic transportation

Methods of Purchase

Purchases afloat are made by one of the following methods:

- Purchase order for purchases not in excess of $2500
- Imprest fund for cash purchases when the amount does not exceed $150 ($300 under emergency conditions) as discussed earlier in this chapter
- Orders under indefinite delivery-type contracts and blanket purchase agreements (BPAs) that have been negotiated by ashore activities

A single requirement may not be divided into more than one purchase to avoid the monetary limitations stated above.

When a purchase is made under any of the above procedures and is chargeable to the ship's OPTAR, prepare a DD 1348 as an obligation document. Attach the hardback copy of the DD 1348 to a copy of the purchase document, and place it in the MOF. Place the green copy of DD 1348 in the OPTAR document file 1 by ships that submit budget and OPTAR reports, or promptly forward it to the OPTAR holding activity by ships that do NOT submit budget and OPTAR reports. Discard the original and remaining copies.

Since the imprest fund has already been discussed, we will only discuss the other methods of purchase here.

Purchase Order

The purchase order (Order and Inspection Report, NAVSUP 48) is shown in figure 12-13 as it should be prepared to purchase materiel not exceeding $2500.

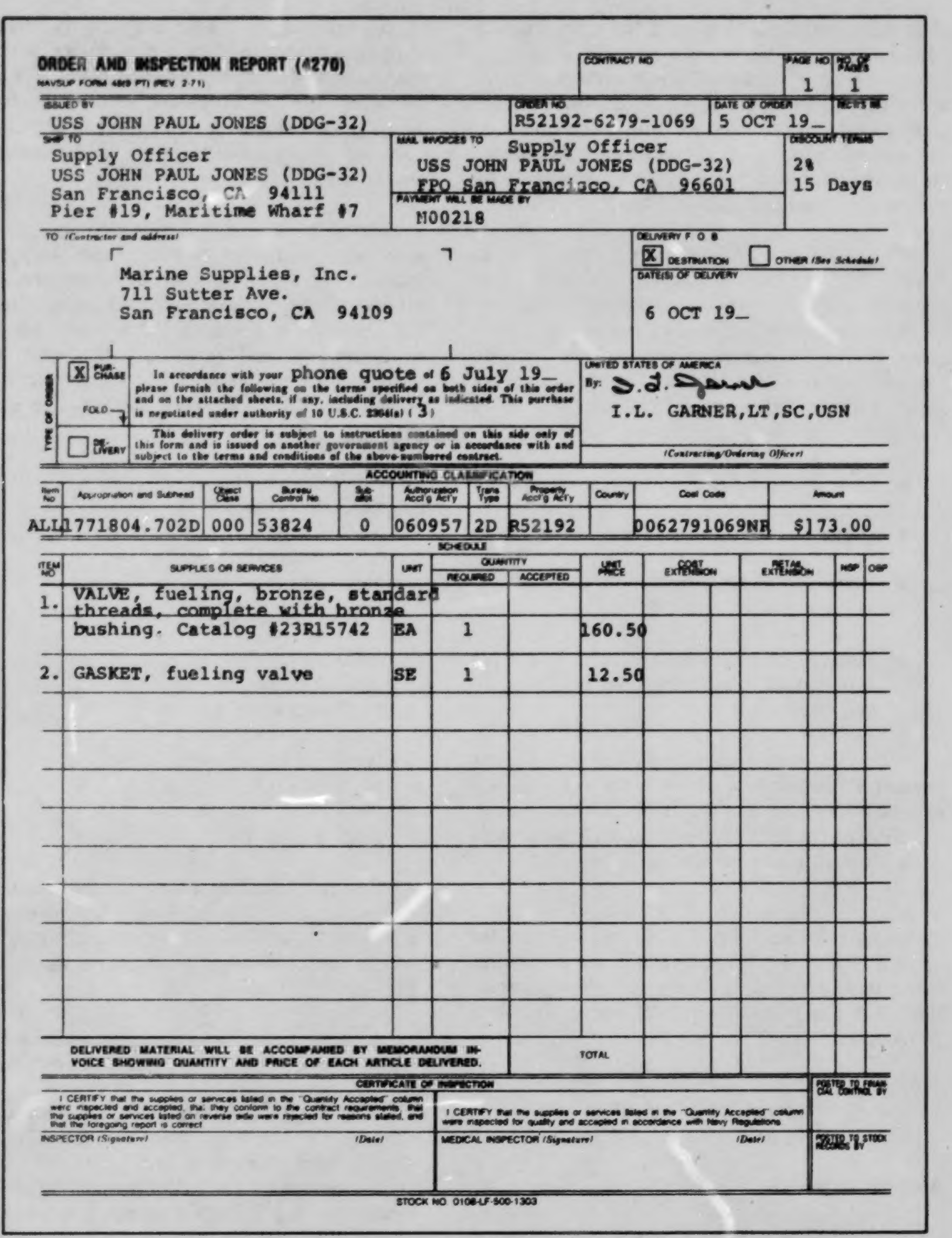
Assign the order number from the regular series of requisition numbers. Indicate the type of order by placing an "X" in the purchase block. Make sure you show the date and place of delivery. If the materiel is to be picked up by a ship's representative, state this on the order. Make the description clear and concise to allow the dealer to correctly identify the requirement. Lastly, have the supply officer who serves as a contracting officer of NAVSUP command sign the purchase order.

NAVSUP 48 is distributed as follows:

- Send the signed original to the vendor.
- Send one copy to the MOF, attach it to the hardback copy of DD 1348, and prepare it as an obligation document.
- Place one copy in the purchase payment file.
- Destroy the remaining copies.

BPAs

A BPA is an arrangement established with a vendor to furnish designated categories of materiel for a specific period. BPAs may not be established by ships but may be requested from the shore supply activity. This simplified method



ORDER AND INSPECTION REPORT (4270)
NAVSUP FORM 48(9 PT) (REV 2-71)

CONTRACT NO
PAGE NO 1
NO OF PAGES 1

ISSUED BY
USS JOHN PAUL JONES (DDG-32)

ORDER NO
R52192-6279-1069

DATE OF ORDER
5 OCT 19_

SHIP TO
Supply Officer
USS JOHN PAUL JONES (DDG-32)
San Francisco, CA 94111
Pier #19, Maritime Wharf #7

MAIL INVOICES TO
Supply Officer
USS JOHN PAUL JONES (DDG-32)
FPO San Francisco, CA 96601

DISCOUNT TERMS
2%
15 Days

PAYMENT WILL BE MADE BY
M00218

TO (Contractor and address)
Marine Supplies, Inc.
711 Sutter Ave.
San Francisco, CA 94109

DELIVERY F O B
☒ DESTINATION ☐ OTHER (See Schedule)

DATE(S) OF DELIVERY
6 OCT 19_

TYPE OF ORDER

☒ PURCHASE — In accordance with your phone quote of 6 July 19_ please furnish the following on the terms specified on both sides of this order and on the attached sheets, if any, including delivery as indicated. This purchase is negotiated under authority of 10 U.S.C. 2304(a) (3)

FOLD

☐ DELIVERY — This delivery order is subject to instructions contained on this side only of this form and is issued on another government agency or in accordance with and subject to the terms and conditions of the above-numbered contract.

UNITED STATES OF AMERICA
By: I.L. Garner
I.L. GARNER,LT,SC,USN
(Contracting/Ordering Officer)

ACCOUNTING CLASSIFICATION

Item No	Appropriation and Subhead	Object Class	Bureau Control No	Sub-allot	Authorization Acct'g Act'y	Trans Type	Property Acct'g Act'y	Country	Cost Code	Amount
ALL	1771804.702D	000	53824	0	060957	2D	R52192		0062791069NR	$173.00

SCHEDULE

ITEM NO	SUPPLIES OR SERVICES	UNIT	QUANTITY REQUIRED	QUANTITY ACCEPTED	UNIT PRICE	COST EXTENSION	RETAIL EXTENSION	NSP	OBP
1.	VALVE, fueling, bronze, standard threads, complete with bronze bushing. Catalog #23R15742	EA	1		160.50				
2.	GASKET, fueling valve	SE	1		12.50				

DELIVERED MATERIAL WILL BE ACCOMPANIED BY MEMORANDUM INVOICE SHOWING QUANTITY AND PRICE OF EACH ARTICLE DELIVERED.

TOTAL

CERTIFICATE OF INSPECTION

I CERTIFY that the supplies or services listed in the "Quantity Accepted" column were inspected and accepted, that they conform to the contract requirements, that the supplies or services listed on reverse side were rejected for reasons stated, and that the foregoing report is correct

INSPECTOR (Signature) (Date)

I CERTIFY that the supplies or services listed in the "Quantity Accepted" column were inspected for quality and accepted in accordance with Navy Regulations

MEDICAL INSPECTOR (Signature) (Date)

POSTED TO FINANCIAL CONTROL BY

POSTED TO STOCK RECORDS BY

STOCK NO. 0108-LF-500-1303

43.23

Figure 12-13.—Purchase Order NAVSUP Form 48.

of making small purchases on the open market establishes charge accounts with qualified supply sources to cover expected small item purchases in the same general category. Since this arrangement eliminates the need to issue individual purchase orders for small requirements, make purchases by placing orders, either orally or by informal memoranda against the BPA.

When a BPA is desired and the conditions in NAVSUP P-485 exist, the supply officer or commanding officer of a ship without a Supply Corps officer attached must submit a letter request to the supporting shore supply activity requesting that a BPA be established. Forward a copy of this letter to the TYCOM, and make sure it contains the following information:

- Type of supplies or services required
- Suggested sources of supply
- Period during which the supplies or services will be required
- Name(s) of individuals within the supply department authorized to place calls against the BPA

When the supply activity determines that the request is justifiable, the supply activity will negotiate and prepare the BPA. Send copies of the BPA to the ship, the vendor, and the activity designated to make payment.

Materiel is obtained by the authorized person designated in the BPA by placing calls to the vendor. Consult NAVSUP P-485 for additional information on call procedures, billing, screening, and the review required under the BPA procedure.

STOCK POINTS AND SOURCES OF SUPPLY

STOCK POINTS

Stock points consist of naval supply centers (NSCs), naval supply depots (NSDs), and industrial naval air stations (INASs).

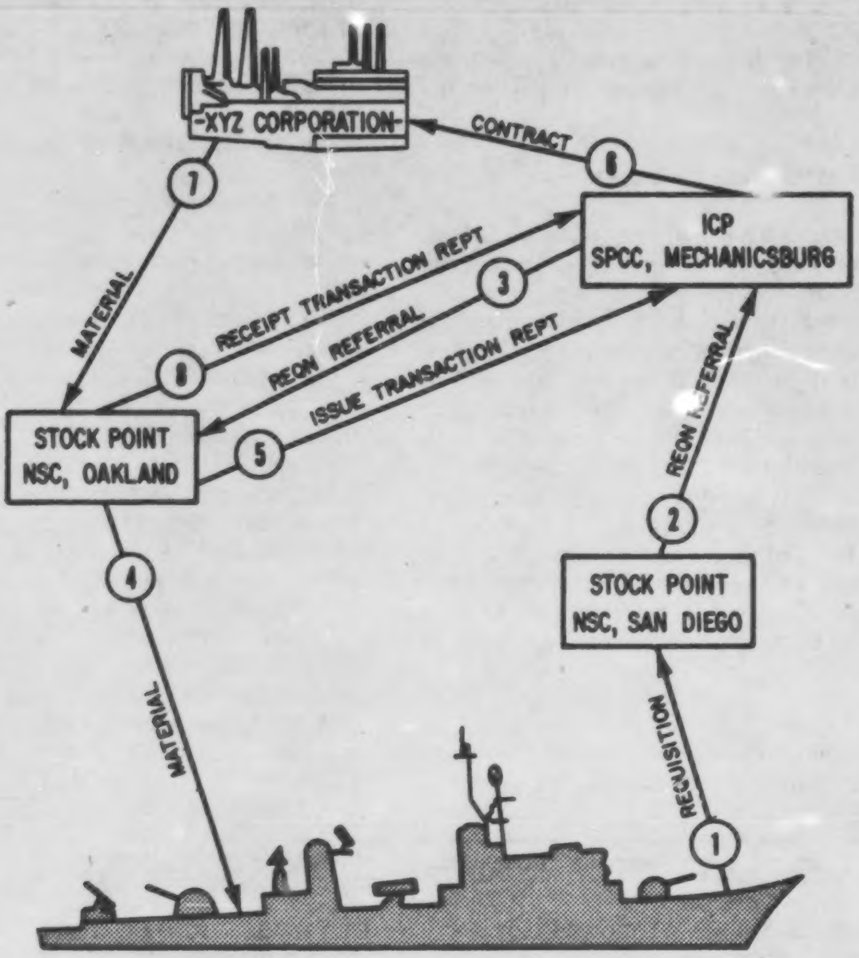
The mission of these activities is to furnish supply support to fleet units, shore activities, transient ships, and overseas bases. They accomplish this by procuring, receiving, storing, issuing, and shipping or making other distribution of Navy, DLA, and GSA cognizance materiel.

Stock points are designated as reporting activities, and they render issue and receipt transaction reports to inventory control points (ICPs). Using these reports as a basis, the ICPs compute the position of individual stock items, and they replenish these activities by awarding contracts or by transferring stocks from other activities. The following activities are stock points:

NSC Charleston
NSC Norfolk
NSC Oakland
NSC Pearl Harbor
NSC Puget Sound
NSC San Diego
NSD Guam
NSD Subic Bay
NSD Yokosuka
NAS Alameda
NAS Cherry Point
NAS Jacksonville
NAS Norfolk
NAS North Island
NAS Pensacola

Figure 12-14 illustrates the operation of the Navy Supply System from the receipt of a customer's requisition to the replenishment of stock. The following is an explanation of the process:

1. USS *John Paul Jones* submits a requisition to NSC, San Diego, for a cognizance symbol 1H repair part.
2. After researching their records and determining that the item is not in stock, NSC, San Diego, refers the requisition to the proper inventory manager for cognizance symbol 1H materiel, Ship's Parts Control Center (SPCC), Mechanicsburg.
3. SPCC, Mechanicsburg, after researching their master records and determining that the


XYZ CORPORATION
CONTRACT
6
ICP
SPCC, MECHANICSBURG
7
MATERIAL
RECEIPT TRANSACTION REPT
REQN REFERRAL
3
8
ISSUE TRANSACTION REPT
STOCK POINT
NSC, OAKLAND
5
REQN REFERRAL
2
STOCK POINT
NSC, SAN DIEGO
4
MATERIAL
REQUISITION
1

123.174

Figure 12-14.—Operation of the Navy Supply System.

requested item is in stock at NSC, Oakland, refers the requisition to NSC, Oakland.

4. NSC, Oakland, issues the materiel to USS *John Paul Jones*.

5. NSC, Oakland, makes an issue transaction report to SPCC, Mechanicsburg.

6. SPCC, Mechanicsburg, after applying the issue reports to its master record, ascertains that NSC, Oakland's stock of the item is below the required level and issues a contract to the XYZ Corporation to replenish NSC, Oakland.

7. The XYZ Corporation ships the materiel to NSC, Oakland.

8. NSC, Oakland, makes a receipt transaction report to SPCC, Mechanicsburg.

SOURCES OF SUPPLY

The materiel required to support your ship is normally procured through the supply systems of the Navy or DOD. However, in emergencies, procurement may be by transfer from another ship or by purchase on the open market. Operation orders and instructions issued by fleet commands, type commands, and service force commands specify the sources of supply for ships.

Within the United States

When your ship is within the United States, submit supply requisitions directly to the nearest supply support activity or NSC.

They either furnish the materiel or pass the requisition to the appropriate activity for action. The supply department of a naval shipyard or other ashore activity may issue maintenance items to ships while at that activity. However, submit requisitions for major stock replenishment to the established supply support activity.

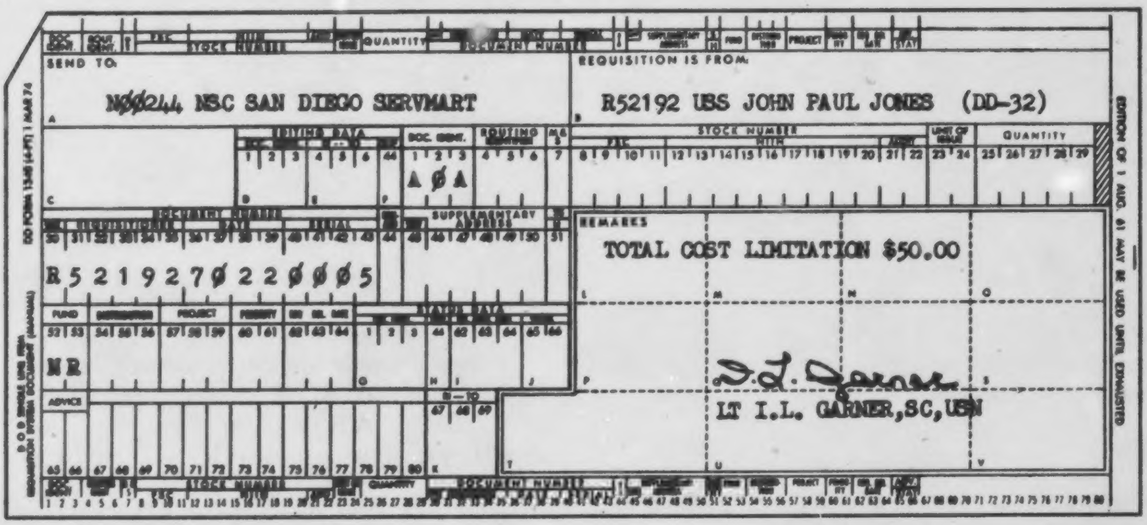
SERVMARTS are convenient sources of materiel that permit the use of a single money value only (MVO) requisition to procure several stock items. SERVMARTS are located at most major naval bases and are designed like modern supermarkets.

When obtaining materiel from a SERVMART, prepare a DD 1348 as an MVO requisition based on DTO requests or storeroom stock deficiencies. Each of the following categories of materiel is listed on a separate DD 1348 when SERVMART shopping lists (SSLs) are used:

- Consumable items ordered for DTO
- Consumable items ordered for stock
- Repair parts ordered for DTO
- Repair parts ordered for stock
- Equipage
- Medical/dental materiel

If yellow copies of NAVSUP 1250 or 1250-1 are used, only one DD 1348 is required for stock and DTO consumables and for stock and DTO repair parts. To aid you in preparing requisitions, each SERVMART prepares shopping guides that list items stocked and distributes these guides to ships and activities in the area.

Upon receipt of internal requests, prepare DD 1348 to cover the money value, and give the original to the person authorized on the form to pick up the materiel. An example of an MVO requisition using DD 1348 is shown in figure 12-15.



SEND TO: N00244 NSC SAN DIEGO SERVMART

REQUISITION IS FROM: R52192 USS JOHN PAUL JONES (DD-32)

DOC. IDENT.: A0A

DOCUMENT NUMBER: R5219270220005

FUND: NR

REMARKS: TOTAL COST LIMITATION $50.00

I.L. Garner

LT I.L. GARNER,SC,USN

EDITION OF 1 AUG. 61 MAY BE USED UNTIL EXHAUSTED

43.24

Figure 12-15.—Money Value Only Requisition, DD Form 1348.

Overseas

Ships in overseas waters receive supply support through submission of requisitions to MLSF units or overseas bases as specified in operation orders and instructions issued by fleet commands. Supply support from these ships is normally received by underway replenishment. Procedures for obtaining support from fleet issue ships are set forth in CINCLANTFLT, CINCPACFLT, and COMSIXTHFLT Requisitioning Guides. Local commands and operating conditions determine whether the underway replenishment is to be by conventional replenishment (CONREP) ship alongside, vertical replenishment (VERTREP) helicopter, or both at the same time.

When normal supply sources are not available and general stores stock is exhausted, transfer items from the ship's store or subsistence stock for the ship's use. For example, transfer cornstarch from the subsistence stock to use in cleaning the boilers or flashlights from the ship's store for general use.

Such transfers are made on DD 1149 and are charged to the ship's OPTAR. Show the complete accounting data on the transferring DD 1149 for both the charge and the credit.

Emergency requirements may be obtained from ships other than supply ships and tenders if the materiel is avialable and can be spared. Make the request on a DD 1348, or send a message and make sure it contains the same information as a requisition to a supply activity except for the routing identifier that is left blank. If the requested materiel is not available for issue, return the requisition to the requisitioner since ships do not hold requisitions on back order for later issue.

REQUISITION FILE MAINTENANCE

The full cycle of requisition file maintenance begins when you prepare a new requisition and place the hardback copy of the DD 1348 (or copy of other procurement document) in the MOF. When all the materiel ordered has been received or canceled, place the requisition document, with a copy of the receipt document attached, in the materiel completed file (MCF). The cycle ends when the charge has been cleared through the Fleet Accounting and Disbursing Center (FAADC) at San Diego or Norfolk and reported to your ship. The steps in between are largely dependent upon the volume of requisitions prepared and the procedures used in your office. Here we will discuss only the MOF.

MOF

The majority of procurement documents are DD 1348s. Maintain the file of DD 1348s in a card file that accommodates EAM cards. Also, keep the documents in number sequence. As you saw in the chart on distribution of the DD 1348, the hardback copy is the MOF copy.

DD 1149 and other purchase documents are folded to approximately the size of EAM cards. These documents are attached to the hardback copy of the DD 1348, which is prepared as an obligation document under the procedures in NAVSUP P-485.

SUPPLY STATUS

You must keep records of supply status. The amount and kind of status you receive is determined by the M&S code assigned on the requisition. The purpose of status is to keep you informed of the action taken by supply activities to furnish the requested materiel.

Supply status is usually received on a DD 1348, but it may also be received by message on high-priority requisitions and by speedletter.

Requisition Followup

When you have received no positive action on a requisition, send the supply activity a document identifier followup in the AT____ series of MILSTRIP. The AT____ followup is converted by the supply activity into an AO____ requisition if there is no record of the original requisition. This saves time and eliminates the need to prepare additional documents. If the followup is mailed on an exception data requisition, make sure the AT____ followup contains all the data in the original requisition.

STOWAGE

SPECIAL STOWAGE

You will have many items that require special stowage. The Naval Ships' Technical Manual, chs. 670 and 9230, and the Consolidated Hazardous Item List (CHIL) outline the requirements for shipboard stowage of dangerous and semisafe materials and list the materials under each classification. The Department of the Navy Information Security Program Regulation (OPNAVINST 5510.1) prescribes the requirements for stowing and handling classified material. We will now consider the classifications of material and discuss storage requirements for special types of material.

HAZARDOUS MATERIAL.—This includes all types of compressed gases and materials that present a considerable fire hazard or are otherwise dangerous. Except as provided below, stow these materials in the paint and flammable liquid storerooms. Paint and oil constitute the bulk of materiel in this category. The paint and flammable liquid storerooms are normally provided with sprinkler and CO_2 smothering systems that can be activated by automatic temperature-sensitive devices inside and by manual controls outside the storerooms. A flooding system operated manually outside the storerooms is an additional safety factor. These storerooms are located, when practical, below the full-load waterline, near either end of the vessel, and not adjacent to a magazine. They are equipped with watertight doors that must be locked and dogged when not in use.

COMPRESSED GASES.—Stow compressed gases on the weather deck and securely fasten them in a vertical position. Protect the cylinder valves from accumulations of ice and snow, and screen the cylinders from direct rays of the sun. NAVSUP P-485 contains general rules for handling compressed gas cylinders.

ACID.—Liquid acid, unless classified as safe material, is stowed in lead-lined boxes or chests in a storeroom below the full-load waterline in which the deck and lower part of the bulkhead has a watertight lead lining.

ALCOHOL.—Stow alcohol in a locked container in the paint and flammable liquid storeroom, to which only the supply officer or other officer designated in writing by the commanding officer has the key or combination.

SHELF-LIFE MATERIAL.—This material is subject to deterioration. These items are assigned a "SHELF-LIFE CODE" listed in the NMDL and in the List of Items Requiring Special Handling (LIRSH). The code denotes the shelf-life span of material from the date of manufacture to the date of disposal or date of testing according to the inventory manager's instructions to extend the shelf-life. Type I codes (alpha) apply to items for which shelf-life cannot be extended. Type II codes (numeric) apply to items for which shelf-life can be extended.

OTHER REPAIR PARTS.—You must try to stow all repair parts in their original containers. With today's improving techniques and the material used in packaging, you can store repair parts for a considerable time without damage from dust, shock, or humidity.

STOREROOMS

Maintenance

When you are in charge of a storeroom, you are also responsible for maintaining the space. Before you secure each night, sweep the storeroom and remove all trash. Clean bins, shelves, ventilation ducts, and fans periodically.

The condition of your space is also your responsibility. Rust is an ever-present enemy and requires constant vigilance to keep it under control. Rust spots should be chipped, wire brushed or sanded, primed, and spot painted. Tighten loose bolts promptly to prevent possible damage to the storeroom or its contents. Examine pipes, valves, electrical systems, watertight fittings, and firefighting equipment daily, and report any defect to the supply officer.

Before getting underway into open seas, thoroughly inspect and secure storerooms to prevent stores from shifting due to the ship's motion. Lash bulk stores to bulkheads, stanchions, or battens, and secure the fronts of open bins and shelves to prevent stores from falling out on deck.

Unless approval is obtained from the commanding officer, do not stow personal gear in storerooms designated for supplies.

Security

The following general security rules apply to medical supply spaces:

- Keep all materiel in store under lock and key except when the bulk of such materiel makes such stowage impractical.

- Keep medical supply spaces locked when not attended by authorized personnel.

- The person in charge of the space is responsible for its security.

- Obtain permission for entry of persons ordinarily not authorized to have access to medical supply spaces from the medical or the designated representative.

- Do not secure a medical supply space so that damage control equipment cannot be brought into the area in an emergency.

- Make sure the ship's custodian does not take the keys to medical supply space padlocks.

- Use a key log to identify the holders of keys removed from the key locker.

- Do not record combinations to combination locks except as prescribed in NAVSUP P-485.

- All key padlocks must be 1 1/2 inch, pin tumbler type, with dead bolts, either brass or bronze. Make sure the locks are keyed individually and are furnished with two master keys for each group and two grand master keys for each set.

- All keyless padlocks will be the three combination manipulation resistance type 8077A, NSN 9Z5340-00-285-6523.

- Change the combinations on keyless padlocks at least every 6 months.

INVENTORY MANAGEMENT

Shipboard materiel inventories are divided into three segments for management purposes: operating space items (OSI), repair parts, and consumables.

OSIs are those items in the custody and under management of department heads.

Repair parts are in the custody of the supply officer when supply department stowage space permits and is always under his or her management.

Consumables are in the custody of the supply officer when supply department stowage space permits. Stocked consumables are managed by the supply officer whether such items are stored in supply department spaces or in other departmental spaces. Nonstocked consumables are in the custody and under management of other department heads.

DEFINITIONS

Throughout this section, various terms are used in referring to inventory control. Some of these terms are discussed here to help you understand them completely and apply them correctly. NAVSUP P-485 provides definitions for all the terms used in inventory control.

Inventory—the quantity of stocks on hand for which stock records are maintained, or the function whereby the materiel on hand is physically inspected and counted and stock records reconciled accordingly.

Safety Level—the quantity of materiel, in addition to the operation level, required to be on hand to permit continuous operations if normal replenishment is interrupted or if there are unpredictable fluctuations in issue demand (normally for 3 months).

Operating Level—the quantity of materiel (exclusive of safety level) required to sustain operations during the interval between successive requisitions (normally for 3 months). It is usually the difference in the quantity between the requisitioning objective (high limit) and the reorder point (low limit).

Stockage Objective—the maximum quantity of materiel to be maintained on hand to sustain current operations normally for 6 months. It includes the sum of stocks represented by the operating level and the safety level.

Order and Shipping Time—the time elapsing between submitting a requisition and receiving the materiel requisitioned (equivalent to procurement lead time).

Average Endurance Level—the quantity of materiel normally required to be on hand to sustain operations for a stated period without augmentation; it is the median between the safety level and stockage objective.

High Limit (Requisitioning Objective)—the maximum quantity of materiel to be maintained on hand and on order to sustain current operations normally for 9 months; it includes the sum of stocks represented by the operating level, the safety level, and the order and shipping time.

Low Limit (Reorder Point)—this stock position signals the need to start replenishment action; it includes the sum of stocks represented by the safety level and the order and shipping time.

Not Carried (NC) Items—items not stocked in storerooms or for which stock records are not maintained.

Not in Stock (NIS)—items carried in stock but not on board when demand occurs.

Demand—the request for an NC item that will be procured, or an issue of a stock item.

Frequency of Demand—the number of requests for an item within a given time frame, regardless of the quantity requested or issued.

Stock Fund Operations—the decision to stock an item at a supply center is made by a computer whose logic runs "We will start to stock a new item only when it has been asked for 3 times in 6 months. We will only continue to replenish an item if it is being asked for 3 or more times in 6 months." If the medical supply person decides to order 6 months of materiel at once instead of ordering each time an item is NIS, the supply center computer may interpret the data as meaning no demand. The center may stop carrying the item even though the ship has a regular need for the item. As a result, it will take longer to receive materiel the next time it is ordered because none is available at the local supply center. It is better to get a realistic low limit and reorder smaller quantities frequently.

Selected Item Management (SIM)—an inventory control principle which, in nonautomated ships, focuses management attention on the few items that are used most frequently.

Supply Overhaul Assistance Program (SOAP)—an overhaul procedure divided into several phases, designed to weed out obsolete and unused items.

a. Medical supply personnel prepare new inventory cards, which comprise updated AMAL and ship's formulary that are sent to the shipyard SOAP team.
b. The ship offloads all storeroom items to warehouse space, and starts rehabilitation of storerooms.
c. The ship's medical SOAP team, composed of HMs with SK assistance, identifies and inventories all items. Record the inventory on inventory cards. Note the items to be added to the ship's formulary; mark and set aside those items to be disregarded and surveyed.
d. As AMAL and formulary changes are made during the overhaul, make corrections and new cards to keep the ship's AMAL up-to-date.
e. Review the ship's current file of medical stock cards, and record all usages (issues) on the appropriate inventory cards.
f. Process the inventory cards, and use their data to prepare new stock record cards, locator cards, invoices covering excess medical materiel to be turned in to the supply system, requisitions for deficiencies, and a frequency and demand listing. The frequency and demand listing gives usage information based on entries you made on the inventory cards. It lists the stock numbers and shows the number of times and quantity issued during the past 24 months. This listing is most useful in setting your high and low limits.

g. The shipyard SOAP personnel will assist you in processing the turn-in of excess materiel and in requisitioning deficient materiel as directed by your TYCOM.

h. Rehabilitation of shipboard storerooms includes the remarking of shelves and bins. Stow medical supplies in storerooms.

Intermediate Maintenance Activity (IMA) Technical Stores—supply department stocks of repetively demanded repair parts and equipment related consumables (on board tenders and repair ships) that are stored in other departmental spaces for ready availability in accomplishing IMA functions. To qualify for inclusion in IMA technical stores, an item must be used by only one shop (or one group of contiguous shops) and meet the frequency of demand criteria specified by your TYCOM. The quantity of each item in the custody of another department, plus the on-hand quantity of any backup stock in supply department storerooms, must not exceed the ship's prescribed stockage objective. IMA technical stores will not include MTR, critical, or preexpended bin (PEB) items; nor will they include bulkhead-mounted spares or bulky consumables that are otherwise authorized to be stored in other departmental spaces.

Critical Item—this is an item that is essential to the operational readiness of the ship or aircraft and is in short supply in system stocks (or is expected to be in short supply for an extended period). Lists of critical items, with appropriate materiel control or inventory reporting instructions, are distributed periodically by inventory managers to specifically designated ashore and afloat activities. The term critical items may also be used afloat to refer to high usage, bulky consumables, such as rags and toilet paper, which must be replenished often because of shipboard space constraints.

Automated Ships—these ships are equipped with an electronic digital computer (EDC) system, such as the Univac 1500, for processing supply and accounting documents and records.

Nonautomated Ships—these ships have no EDC equipment. Ships having only keypunch facilities are considered nonautomated.

REQUIRED FORMS

The following is a list of forms required for inventory management of general stores on nonautomated ships. NAVSUP P-485 gives detailed instructions on preparing the forms; however, a few of them are discussed in this chapter.

DD Forms	Title
1149 (9)	Requisition and Invoice/Shipping Document
1348 (2/4/6)	DOD Single-Line Item Requisition System Document (Manual)
1348-1	DOD Single-Line Item Release/Receipt Document
1348-6	Non-NSN Requisition (Manual)
1348m	DOD Single-Line Item Requisition System Document (Mechanical). (Required only by ships with keypunch capability.)

NAVSUP Forms	Title
48 (9)	Order and Inspection Report
154	Survey Request, Report and Expenditure
306	Controlled-Equipage Custody Record
1075	Afloat Locator/Inventory Record
1114	Stock Record Card Afloat
1176-1	Julian Date Calendar—Perpetual
1220	Allowance Change Request/Report
1250 (5)	Single-Line Item Consumption Document (Manual). (Required only by nonautomated ships other than those in the submarine forces.)
1250-1 (7)	Single-Line Item Consumption/Requisition Document (Manual). (Required only by ships in the submarine forces.)

SIM

Any item that has had a frequency of demand of two or more demands within the past 6 months or has a predictable demand frequency of two or more demands based on deployed or seasonal usage is designated a SIM item. Any item that does not meet the demand frequency for SIM items is designated as non-SIM. Any consumable item that meets the frequency of demand criteria for a SIM item but is not stocked by the supply department (usually because of space limitation) is designated as a SIM-DTO item. Inventory management of repair parts and consumables designated as SIM items requires:

- Close and continuing attention
- Quarterly stock status review
- Semiannual inventory
- Verification or update of pertinent management data in stock records upon each receipt of a new NMDL
- Stock replenishment based on demand, with the use of high and low limits
- Collective storage in centrally located storerooms except for items which, because of their physical characteristics, cannot be properly stored in such locations
- Separate file of stock records

Inventory management of non-SIM repair parts and consumables requires:

- Close attention only upon receipt and issue of materiel
- Inventory of the remaining balance of an item after each issue
- Reference to the NMDL for verification of pertinent management data only when an item is requisitioned
- Stock replenishment on a one-for-one basis except when otherwise prescribed by the TYCOM or when excess stock is on hand
- Stock records filed separate from SIM stock records

PHYSICAL INVENTORY

Physical inventory is a prerequisite to efficient inventory control. The primary objective of a physical inventory is to ensure that the inventory balances as reflected in stock or custody records agree with the actual physical quantities on hand.

Types of Inventory

Several different types of inventories are conducted, depending upon the type of materiel involved and type of information needed.

Bulkhead-to-Bulkhead

A bulkhead-to-bulkhead inventory is a physical count of all stock materiel within the ship or within a specific storeroom. This inventory of the ship's entire stock of repair parts usually is taken during a SOAP. A bulkhead-to-bulkhead inventory of a specific storeroom is taken when a random sampling inventory of that storeroom fails to meet the inventory accuracy rate of 90% when directed by the TYCOM as a result of a supply management inspection (SMI). It is also taken when directed by the commanding officer or when circumstances clearly indicate that it is essential to effective inventory control.

Specific Commodity

The specific commodity inventory is a physical count of all items under the same cognizance symbol, FSC, or that support the same operational function, such as boat spares, electron tubes, boiler tubes, or fire brick. This inventory is taken under the same conditions as a bulkhead-to-bulkhead inventory; however, prior knowledge of specific stock numbers and item location is required to conduct a specific commodity inventory.

Special Materiel

A special materiel inventory requires the physical count of all items which, because of their physical characteristics, costs, mission essentiality, and criticality, are specifically designated for separate identification and inventory control. Special materiel inventories include, but are not limited to, stocked items designated as classified or hazardous. Special materiel inventories also include controlled equipage and presentation silver. Physical inventory of such materiel is required on a scheduled basis as prescribed in NAVSUP P-485.

CLASSIFIED ITEMS.—Inventory classified items annually and upon each change of custodial responsibility.

HAZARDOUS ITEMS.—Hazardous items are toxic, corrosive, oxidizing, flammable, radioactive, or other materials that pose a potential hazard to life or property. Inventory hazardous items identified in stock records by hazard item codes H, F, M, or R annually. It is also mandatory to inspect each unit of each item for its condition, correct identification, and proper labeling.

SECURITY ITEMS.—You must inventory security-type medical supplies, such as narcotics, precious metals, alcohol, and alcoholic beverages (code R in the notes column of the Federal Supply Catalog C-65-IL secs). This also comprises inventorying those items identified in stock records by locally assigned management codes or appropriate notations monthly and upon each change of custodial responsibility. Other controlled medical items, such as barbiturates, antibiotics, and other drugs or substances coded K, are inventoried monthly.

OTHER MATERIEL.—Other stock items that may be specifically designated by the inventory manager, fleet commander, TYCOM, or the commanding officer for special inventory control are inventoried according to the frequency criteria established by the directing authority.

SHELF-LIFE ITEMS.—Deteriorative shelf-life items, other than those included in the items just discussed, do not require a periodic inventory. Screen these items often to ensure their timely use or transfer before the shelf-life expiration dates.

Spot Inventory

A spot inventory is an unscheduled physical inventory that is taken to verify the existence or nonexistence of a specific stock item. It is usually taken when the verified stock record for a requested item shows an on-hand balance, and the issue request indicates that the item is NIS. A spot inventory is also taken to determine the on-hand quantity of a particular item when it is requested by the commanding officer, a fleet commander, TYCOM, a cognizant inventory manager, or other competent authority. For example, the commanding officer may request the physical inventory of any item that he or she considers highly essential to prospective operations. Also, a fleet commander or TYCOM may need to have total asset visibility of a particular critical item; or an inventory, disposition, and report of certain items, which after distribution within the supply system, are found to be defective.

Velocity Inventory

A velocity inventory is based on the premise that inaccuracies of stock record balances for any given items increase proportionately with issue frequency; therefore, concentrate most of the physical inventory effort on frequently demanded items. A velocity inventory requires a periodic physical count of all stock items that experience frequent demands (fast movers) and a physical count of items that experience infrequent or no demands (slow movers). Periodic inventories of SIM items and postissue inventories of non-SIM items are examples of velocity inventories.

SIM Materiel.—Inventory SIM materiel in nonautomated ships semiannually, and complete the inventory within 2 weeks after commencement.

Non-SIM Materiel.—Except for items designated as special materiel, or unless warranted under conditions previously discussed, do not take a complete inventory of non-SIM materiel. However, to provide sufficient stock record card accuracy for effective inventory control, inventory the balance of each item after each issue.

Random Sampling Inventory

The random sampling inventory is considered part of the annual scheduled inventory program. It is used only by authorized ships such as automated special accounting class 207 ships and automated aircraft carriers (except for aeronautical materiel). This inventory is a measure of the stock record accuracy for materiel based on the physical count of a specified number of randomly selected items within the segment. NAVSUP P-485 explains how to conduct a random sampling inventory.

Physical Inventory Schedules

Inventory schedules outline, in chronological sequence, the segments of materiel planned for physical inventory during a FY. The supply officer prepares the inventory schedule before the beginning of each FY. For stock materiel in departmental custody, the inventory schedule reflects the time frames jointly determined by the supply officer and the department head.

Inventory Personnel

The supply officer provides advisory assistance for inventories of materiel in the custody of departments other than the supply department. The person in charge of the storeroom is usually responsible for inventorying materiel in it.

Preparing for Inventory

Before the inventory is taken, collect all updated receipt and expenditures documents concerning the materiel and post them on stock record cards. The person in charge of the storeroom should inspect the spaces and rearrange stock to ensure that:

- Loose articles are repackaged in standard bulk lots where possible.

- All stock is labeled or otherwise clearly identified.

- Cartons and other containers are stowed with labels and other identifying information facing out where possible.

- Containers with broken seals are checked to ensure that a full count of materiel is present and the container is prominently marked to show the actual count and the date of the count.

At least 1 week before the inventory, the supply officer usually requests the executive officer to include an official notice in the Plan of the Day, indicating that a particular storeroom or certain stock will be inventoried. This notice lists the dates and restrictions that must be observed during the inventory period.

Inventory Procedures

Since inventories are conducted to ensure that stock on hand or in the pipeline agrees with information on the stock records, you can see the importance of a complete and accurate inventory. To reduce errors, you must:

- Work quietly and without haste.
- Write legibly.
- Count correctly.
- Use the correct unit of issue in counting.

Count Documents

Documents authorized for conducting inventory counts of stock materiel include NAVSUP 1075 (whether or not maintained as locator records), EAM cards, and machine or manually prepared listings. Stock Records Cards Afloat, NAVSUP 1114, even when maintained in storerooms, are not to be used as inventory count documents. Inventory count documents usually contain the following information for each item:

- Complete stock number or part number
- Brief item description (optional)

- Unit of issue

- Location of items (except for bulkhead-to-bulkhead inventory of a specific storeroom or other storage area)

Count Procedures

A complete and correct item count is basic to conducting a physical inventory. Inventory personnel must determine the total quantity of each item as accurately as possible during the intial count. Use inventory aids such as tape measures, scales, equivalency tables, and other measuring devices when available. You may open sealed containers when necessary for item identification or quantity verification. Do not break the seals on preservation packaged items without approval of the supply officer. Reseal all opened containers after the contents have been identified and counted. Each container must be dated and initialed by the person who verified its contents.

Whether personnel equipped with appropriate count documents and aids are to inventory all or just certain items in a specific area, they must proceed systematically from location to location in predetermined sequence. Inventory personnel must ensure that:

- Each fragile or potentially hazardous item is conspicuously marked with a warning label.

- Each item is legibly identified by an appropriate stock number or part number.

- Each unit of an item is inspected for its condition, and any quantity apparently unfit for issue or in need of representation is recorded as such.

- Each item is carefully counted, weighed, or measured, and the quantity inventoried is legibly recorded in the count document. (If the same item is stored in multiple locations, record the quantity in each.)

- Quantities and units of issue recorded in count documents are compatible (for example, if 100 bearings are counted, record 50 not 100 if the unit of issue is PR).

- A tag, label, or card, annotated with the inventory quantity and date, is attached to each reel or container from which an item is issued in a unit of measure, such as foot, pound, and gallon, so future issues of such items can be tabulated to reflect the remaining quantity of each reel or in each container.

- Actual location of each item is either checked or entered in the count document.

- Consolidated storage of items with multiple locations is achieved when possible.

- If directed by the supply officer, lockers, cabinets, or drawers used for storage of infrequently demanded items are sealed after a complete inventory of their contents has been verified.

Inventory personnel must be aware of all receipts and expenditures of items included in the segment being inventoried. They must also ensure that documents applicable to such receipts and expenditures are conspicuously stamped or annotated "BEFORE INVENTORY" or "AFTER INVENTORY," as appropriate.

Review of Count Documents

Promptly upon completing the physical inventory, and before matching inventoried quantities with applicable stock record balances, personnel must review inventory count documents to ensure that:

- All items scheduled for inventory either have been counted or have been verified as nonexistent.

- Quantities counted are legibly recorded and compatible with related units of issue.

- All prerecorded locations applicable to the inventory segment have been checked and, for each location, a quantity or 0 is entered. (Inventory personnel must not delete locations prerecorded in count documents even though such locations may be incorrect.)

- Added items are adequately identified and legibly recorded.

- Applicable remarks are legibly entered and explicitly stated.

- Items are documented in NIIN sequence.

- Count documents are dated and initialed.

Reconciliation of Count Documents and Stock Records

Upon completing the physical count and reviewing the count documents, the next step in the inventory process is to compare the count documents with the stock records. This is done to determine if differences exist between the physical count and the amount recorded on stock records.

Upon receipt of inventory count documents from inventory personnel, the medical supply person must ensure that:

- Items are documented in proper sequence

- Multiple cards or entries applicable to the same item are grouped and totaled by NIIN

- All manual entries are legible

- All annotated remarks are clearly understood

- Any obvious omissions or inconsistencies are reconciled immediately by the responsible inventory personnel

When the count documents are correct and complete, compare them, item by item, with the applicable stock records to determine whether differences exist. If no differences exist, post the matched count cards or matched items in the inventory listing to the applicable stock records. Enter the Julian date of the inventory and the notation "INV" in the REQUISITIONS OUTSTANDING column of NAVSUP 1114, and enter the inventory quantity (which should be the same as the existing stock record) in the ON HAND CC. See figure 12-16. If differences exist in on-hand quantities, locations, or other stock record data, reconcile such differences by the procedures outlined in NAVSUP P-485.

Stock Record Cards

Without stock records, it would be impossible to maintain adequate stocks of materiel necessary for the operation of the medical department of a ship. Procurement of stock must be based on the information contained in the stock record cards. Inventory control comprises procurement, stocking, issuing, and accounting for materiel.

The Stock Record Cards Afloat, NAVSUP 1114m (Manual), are the primary records of inventory control. Maintain a stock record card for each stocked repair part or consumable and for each SIM-DTO item.

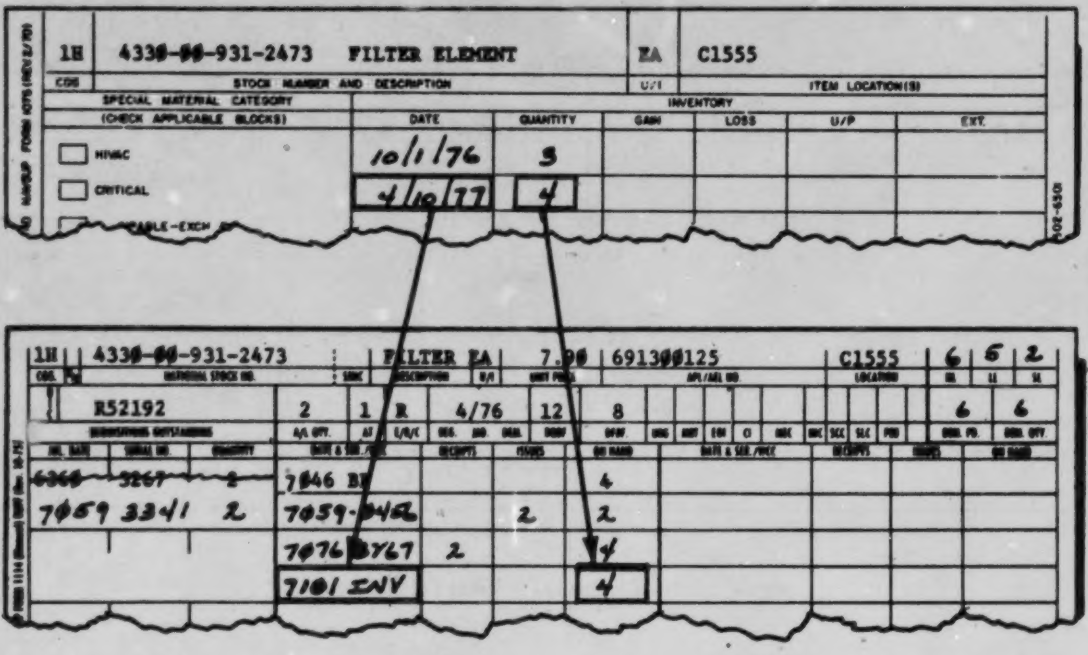
NAVSUP 1114m, which is shown in figure 12-17, is an IBM type of stock record card in which significant management data elements can be keypunched to provide the capabilities of nonautomated data processing equipment.

NAVSUP 1114 (Manual), which is illustrated in figure 12-18, is identical to the NAVSUP 1114m in design. NAVSUP 1114 (Manual) is a continuous-feed stock record form that eases the typing of the top and bottom lines of new stock record cards that must be prepared when the keypunched and interpreted NAVSUP 1114m cards are filled. This form is also useful when new items are added to shipboard stock between supply overhauls. Retain all stock records until they are replaced upon completion of the next supply overhaul.

Description of Captions

The preprinted captions appearing on the top line and at the bottom of NAVSUP 1114m are identical and most are familiar and self-explanatory. Additional information on some of the top and second line data elements may help you understand the captions and the source and use of the data shown.

M/C—The materiel control code is a single alphabetic character assigned by the inventory



1H 4330-00-931-2473 FILTER ELEMENT EA C1555

COG | STOCK NUMBER AND DESCRIPTION | U/I | ITEM LOCATION(S)

SPECIAL MATERIAL CATEGORY (CHECK APPLICABLE BLOCKS)

☐ HIVAC

☐ CRITICAL

DATE	QUANTITY	GAIN	LOSS	U/P	EXT.
10/1/76	3				
4/10/77	4				

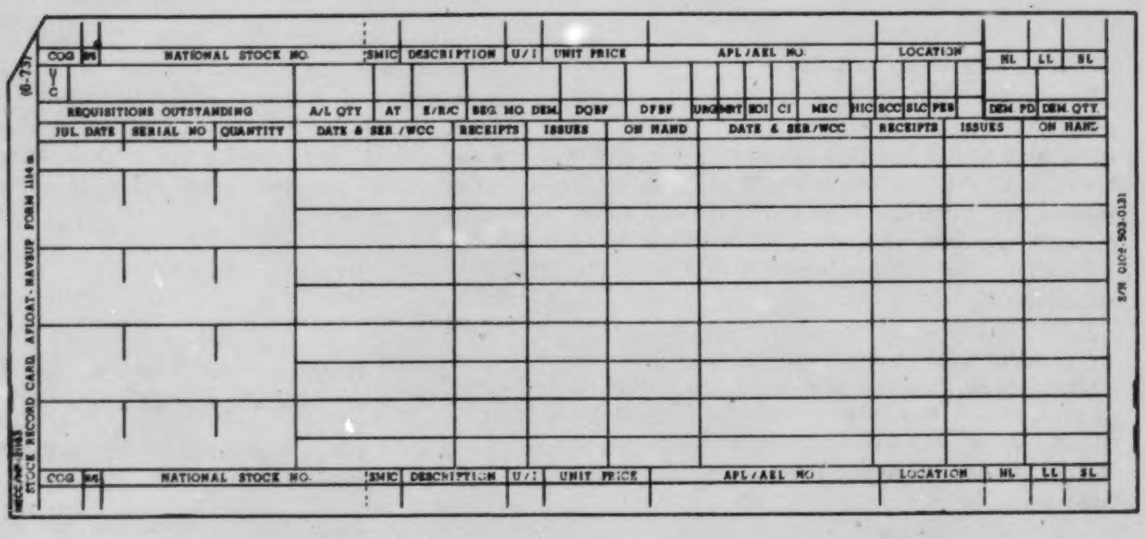
1H 4330-00-931-2473 FILTER EA 7.90 691300125 C1555 6 6 2

R52192 2 1 R 4/76 12 8 6 6

JUL. DATE	SERIAL NO.	QUANTITY	DATE & SER./WCC	RECEIPTS	ISSUES	ON HAND
~~6360~~	~~3267~~	~~2~~	7046 BF			4
7059	3341	2	7059-3462		2	2
			7076 3767	2		4
			7101 INV			4

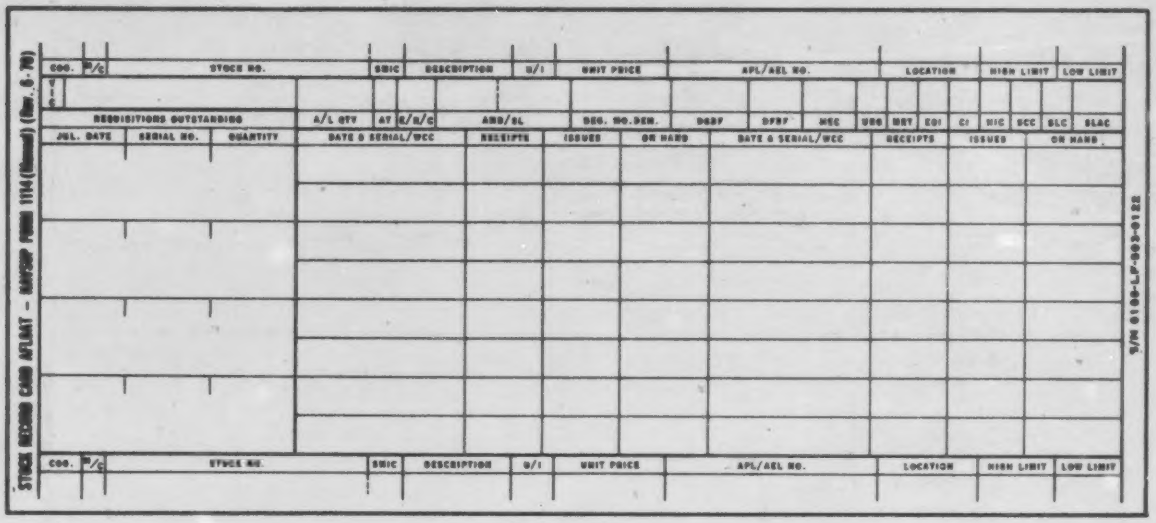
66.19

Figure 12-16.—Posting inventory to stock records.


COG
NATIONAL STOCK NO.
SMIC
DESCRIPTION
U/I
UNIT PRICE
APL/AEL NO.
LOCATION
HL
LL
SL
REQUISITIONS OUTSTANDING
A/L QTY
AT
E/R/C
BEG MO DEM
DOBF
DFBF
URGENT
EOI
CI
MEC
HIC
SCC
SLC
PEB
DEM PD
DEM QTY
JUL. DATE
SERIAL NO
QUANTITY
DATE & SER/WCC
RECEIPTS
ISSUES
ON HAND
STOCK RECORD CARD, AFLOAT- NAVSUP FORM 1114m
S/N 0102-503-0131

66.19

Figure 12-17.—The NAVSUP Form 1114m.


STOCK RECORD CARD AFLOAT – NAVSUP FORM 1114 (Manual) (Rev. 6-70)
COG.
M/C
STOCK NO.
SMIC
DESCRIPTION
U/I
UNIT PRICE
APL/AEL NO.
LOCATION
HIGH LIMIT
LOW LIMIT
REQUISITIONS OUTSTANDING
A/L QTY
AT
R/B/C
AMD/SL
REG. NO.DEN.
DSDF
DFDF
NSC
URC
MRT
EOI
CI
NIC
SCC
SLC
SLAC
JUL. DATE
SERIAL NO.
QUANTITY
DATE & SERIAL/WCC
RECEIPTS
ISSUES
ON HAND
DATE & SERIAL/WCC
RECEIPTS
ISSUES
ON HAND
S/N 0105-LP-003-0122
COG.
M/C
STOCK NO.
SMIC
DESCRIPTION
U/I
UNIT PRICE
APL/AEL NO.
LOCATION
HIGH LIMIT
LOW LIMIT

66.19

Figure 12-18.—The NAVSUP Form 1114 (Manual).

manager to segregate items into more manageable groupings (fast, medium, or slow movers) or to relate to field activities special reporting and control requirements. This is a first line entry and is mandatory for repairable items.

APL/AEL NO.—Allowance Parts List/Allowance Equipage List number for repair parts and equipment-related consumables. If the Integrated Stock List (ISL) indicates that multiple APL or AEL numbers are applicable to the same item, enter the letter "M" instead of an APL/AEL No. Enter "GEN USE" or "GUCL" for nonequipment-related consumables.

LOCATION—Each location in which the item is stored. For non-SIM items, each location as well as the quantity in each location is required; however, avoid multiple locations of non-SIM items when possible. Leave it blank for SIM-DTO items.

HL, LL, SL—High limit, low limit, and safety level quantities are computed according to NAVSUP P-485. This block is used for SIM items only. Enter "SIM DTO" for SIM-DTO items. Leave it blank for non-SIM-DTO items.

A/L QTY—Allowance list quantity. Leave it blank for nonallowance and SIM-DTO items.

AT—Allowance-type code. Transfer the SOAP-assigned AT code forward to the succeeding record when a SOAP-prepared stock record is filled. When the ship prepares a stock record for a new stock item added between SOAPs, enter the appropriate AT code from the following list:

AT Codes	Explanation
1	COSAL item.
2	Load list item (applies to load-carrying ships only).
3	Load/allowance list item (applies to load-carrying ships only).
4	Non-COSAL item that has a frequency of demand of 4 or more in the last 24 months or 2 or more in the last 6 months.

AT Codes	Explanation
5	Non-COSAL item with 0 demand but applicable to on board equipment and within the ship's capability to install.
6	Delete item (no demand, no application).
8	Non-COSAL item that has a frequency of demand of 1, 2, or 3 in the last 24 months but less than 2 in the last 6 months.

E/R/C—See below.

E—for equipage items (special accounting class 207 ships only);
R—for repair parts and equipment-related consumables;
C—for general use consumables.

BEG. MO. DEM.—The beginning date of the demand period (usually the SOAP completion date that is pretyped on SOAP-prepared stock records. The original card received upon completion of the supply overhaul shows the date (month and year of the current supply overhaul) of the current demand period. When the original card is filled and a new card is prepared, bring this date forward with the demand quantity and frequency of demand recorded on the original card. When a card is prepared for a new item between SOAPs, the demand date is the date of the initial requisition.

DQBF—Demand quantity brought forward. This total is brought forward from a filled stock record onto a new stock record.

DFBF—Demand frequency brought forward. This total is brought forward from a filled stock record onto a new stock record.

URG—A checkmark or X if the item is listed in the Consolidated Afloat Requisitioning Guide Overseas (CARGO), indicating that the item is available in the deployed area from ships of the underway replenishment group.

MRT—A checkmark or X if the item is listed in the SERVMART shopping list of the local supply support activity.

EOI—A checkmark or X if the item is designated as an economic order item.

CI—A checkmark or X if the item is designated as a critical item.

MEC—Military essentiality code, as indicated in the COSAL SNSL for repair parts and equipment-related consumables.

HIC—Hazardous item code (H, F, M, or R) if the item is listed in the Consolidated Hazardous Item List (CHIL) or any other special material content (SMC) code that may be used for the item in the COSAL, SNSL, or Special Category Item List (SCIL).

SCC—Security classification code, if applicable.

SLC—Shelf-life code, if applicable.

PEB—A checkmark or X if item is designated as a PEB item.

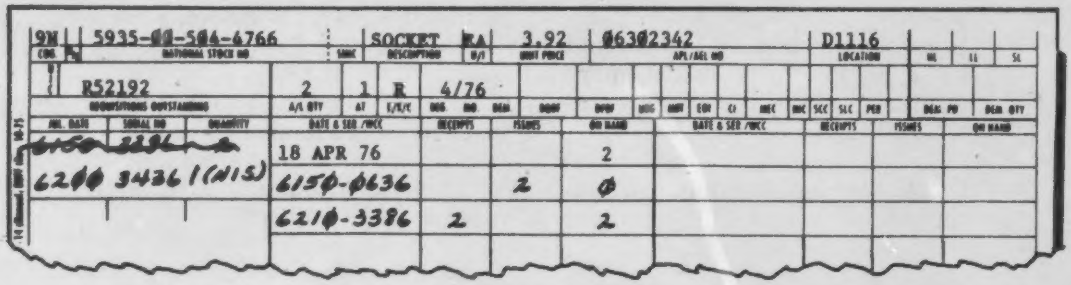
REQUISITIONS OUTSTANDING—The Julian date, serial number, and quantity applicable to each procurement document. Use the lowest part of the column, when applicable, for entry of the NSN of a superseded, superseding, or substitute item.

Preparing New Cards

When the original card is filled, prepare a new card, duplicating the stock item information except for usage data. Enter the beginning date on the new card. Bring forward the demand quantity and frequency of demand totals from the old card onto the new card. Also, transfer any requisitions still outstanding. Retain the old card until the next supply overhaul arrives, and file it according to local practice.

Posting

Post stock record cards daily as you receive the receipt and issue documents. When you are



COG.	NATIONAL STOCK NO.	DESCRIPTION	U/I	UNIT PRICE	APL/AEL NO	LOCATION
9N	5935-00-504-4766	SOCKET	EA	3.92	06302342	D1116

REQUISITIONS OUTSTANDING	A/L QTY	AT	E/R/C	ORG. MO. DEM
R52192	2	1	R	4/76

JUL. DATE	SERIAL NO	QUANTITY	DATE & SER./MCC	RECEIPTS	ISSUES	ON HAND
~~6150~~	~~3386~~	~~2~~	18 APR 76			2
6200	3436	1 (NIS)	6150-0636		2	0
			6210-3386	2		2

66.19

Figure 12-19.—Posting receipts to stock records.

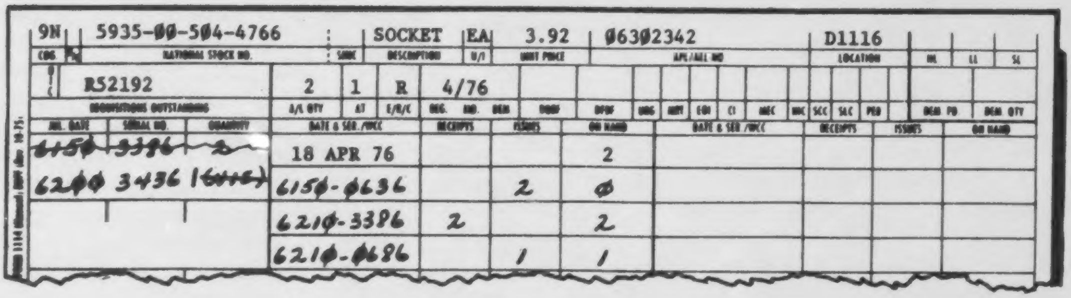
posting the cards, place SIM items before non-SIM items.

Compare the following data elements on receipt documents with those on the stock record cards:

- Cognizance symbols
- NSN
- Unit of issue
- Unit price
- Storage location
- Quantity received with quantity requisitioned

STOCK RECORD ENTRIES—DATA IN AGREEMENT.—If the data elements on the receipt documents and the stock record cards are in agreement, enter the Julian date of the receipt and the serial number of the related requisition in the REQUISITIONS OUTSTANDING column. Enter the receipt quantity in the RECEIPTS column and increase the balance in the ON HAND column by the quantity received. Then draw a single line through applicable requisition data in the REQUISITIONS OUTSTANDING column. See figure 12-19.

If an outstanding requisition for NIS-DTO materiel is indicated in the REQUISITIONS OUTSTANDING column, remove the original and green copy of NAVSUP 1250 from the NIS/NC file or MOF, and forward it to the storeroom for immediate issue. Line through the



COG.	NATIONAL STOCK NO.	DESCRIPTION	U/I	UNIT PRICE	APL/AEL NO	LOCATION
9N	5935-00-504-4766	SOCKET	EA	3.92	06302342	D1116

REQUISITIONS OUTSTANDING	A/L QTY	AT	E/R/C	ORG. MO. DEM
R52192	2	1	R	4/76

JUL. DATE	SERIAL NO.	QUANTITY	DATE & SER./MCC	RECEIPTS	ISSUES	ON HAND
~~6150~~	~~3386~~	~~2~~	18 APR 76			2
6200	3436	1 ~~(NIS)~~	6150-0636		2	0
			6210-3386	2		2
			6210-0686		1	1

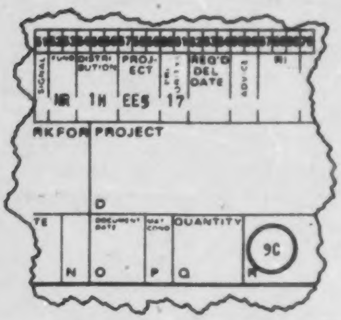
66.19

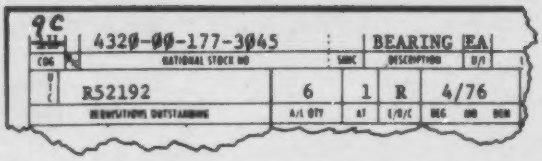
Figure 12-20.—Posting and issuing an outstanding requisition for NIS-DTO material.

notation "NIS" that applies to the outstanding requisition for NIS-DTO materiel, and post the issue, when completed, to the stock record in the normal manner as shown in figure 12-20. When the materiel originally ordered for DTO is received, send the materiel to the storeroom, and post the receipt document to the stock record as a receipt of stock materiel.

STOCK RECORD ENTRIES—DATA DIFFERENCE.—Reconcile any differences determined from a comparison of receipt documents and stock record data as explained in the following paragraphs.

Cognizance Symbol—When the cognizance symbol in the receipt document differs from that in the stock record, change the cognizance symbol in the stock record to agree with that in the receipt document by drawing a single line through the old cognizance symbol and entering the new cognizance symbol directly above as shown here. When you receive materiel on DD 1348-1, enter the cognizance symbol in data block R.

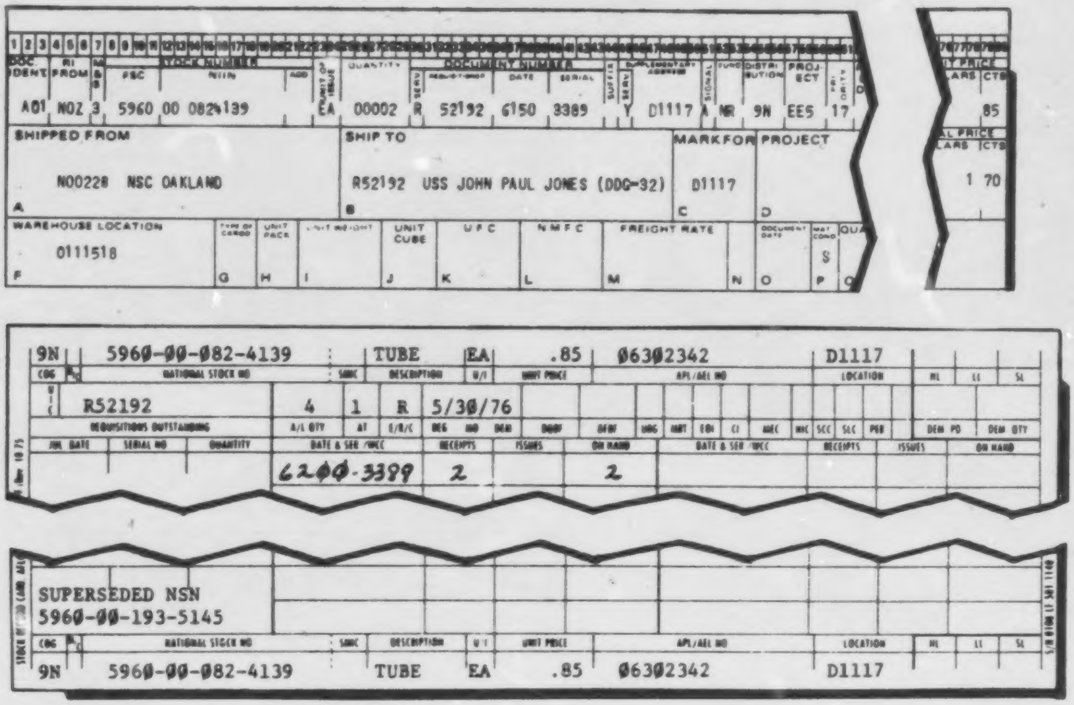

SIGNAL
FUND
DISTRIBUTION
PROJECT
REQ'D DEL DATE
ADV CD
RI
NR
1N
EE5
17
RKFOR
PROJECT
D
TE
DOCUMENT DATE
COND
QUANTITY
N
O
P
Q
R
9C


9C
~~1H~~
4320-00-177-3045
BEARING
EA
COG
NATIONAL STOCK NO
SMIC
DESCRIPTION
U/I
R52192
6
1
R
4/76
REQUISITIONS OUTSTANDING
A/L QTY
AT
I/O/C

New or Superseding NSN—When an item is received under a new or superseding NSN as reflected in the receipt document, prepare a new stock record that shows the same management data (for example, allowance and HL/LL/SL) as the superseded stock record card. Reference the superseded NSN in the lowest block of the REQUISITIONS OUTSTANDING column as shown in figure 12-21. Then close out the stock record for the superseded item by lining through the allowance quantity and the HL/LL/SL quantities of SIM items. Line through the requisition data in the REQUISITIONS OUTSTANDING column, and reference the superseding NSN in the lowest block of the column as shown in figure 12-22.

Do not carry the on-hand balance in the stock record for the superseded NSN forward to the new stock record for the superseding NSN. Now you will not have to remark materiel already in stock when an item is received under a new or superseding NSN. However, review the computation of demand and frequency of demand of both stock records simultaneously to determine replenishment quantities. When a replenishment is required, requisition the new or superseding NSN.

Substitute Item—When a substitute item is received, prepare a new stock record card. Record the cognizance symbol, NSN, description,



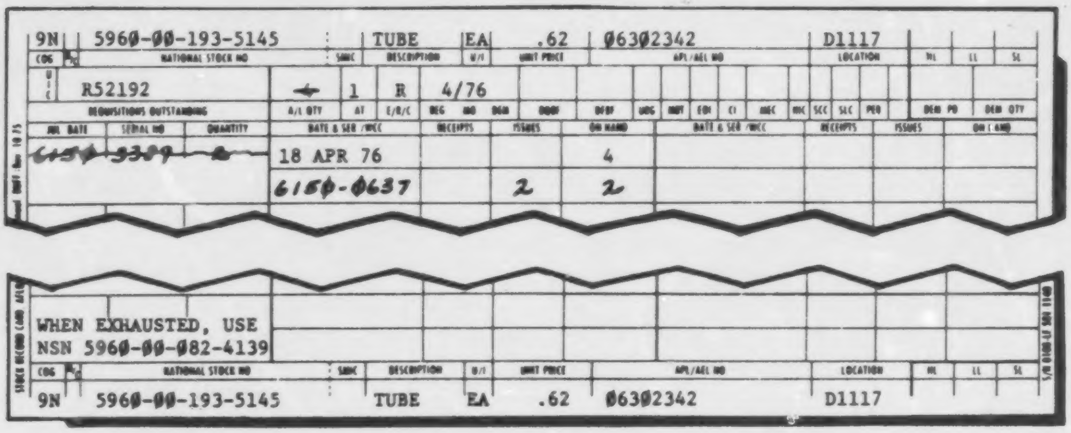
DOC IDENT: A01
RI FROM: N02
M & S: 3
STOCK NUMBER: 5960 00 0824139
UNIT OF ISSUE: EA
QUANTITY: 00002
SERV: R
DOCUMENT NUMBER: 52192 6150 3389
SERV: Y
SUPPLEMENTARY ADDRESS: D1117
SIGNAL: A
FUND: NR
DISTRIBUTION: 9N
PROJECT: EE5
PRIORITY: 17
UNIT PRICE DOLLARS CTS: 85
TOTAL PRICE DOLLARS CTS: 1 70
SHIPPED FROM: N00228 NSC OAKLAND
SHIP TO: R52192 USS JOHN PAUL JONES (DDG-32)
MARK FOR: D1117
WAREHOUSE LOCATION: 0111518
MAT COND: S

COG: 9N
NATIONAL STOCK NO: 5960-00-082-4139
DESCRIPTION: TUBE
U/I: EA
UNIT PRICE: .85
APL/AEL NO: 06302342
LOCATION: D1117
UIC / REQUISITIONS OUTSTANDING: R52192
A/L QTY: 4
AT: 1
E/R/C: R
BEG MO DEN: 5/30/76
DATE & SER /WCC: 6200-3389
RECEIPTS: 2
ON HAND: 2

SUPERSEDED NSN
5960-00-193-5145
COG: 9N
NATIONAL STOCK NO: 5960-00-082-4139
DESCRIPTION: TUBE
U/I: EA
UNIT PRICE: .85
APL/AEL NO: 06302342
LOCATION: D1117

123.178

Figure 12-21.—Preparing stock record for superseding NSN.



COG: 9N
NATIONAL STOCK NO: 5960-00-193-5145
DESCRIPTION: TUBE
U/I: EA
UNIT PRICE: .62
APL/AEL NO: 06302342
LOCATION: D1117
UIC / REQUISITIONS OUTSTANDING: R52192
A/L QTY: ~~4~~
AT: 1
E/R/C: R
BEG MO DEN: 4/76
JUL DATE / SERIAL NO / QUANTITY: ~~6150 3389 2~~
DATE & SER /WCC: 18 APR 76
ON HAND: 4
DATE & SER /WCC: 6150-0637
ISSUES: 2
ON HAND: 2

WHEN EXHAUSTED, USE
NSN 5960-00-082-4139
COG: 9N
NATIONAL STOCK NO: 5960-00-193-5145
DESCRIPTION: TUBE
U/I: EA
UNIT PRICE: .62
APL/AEL NO: 06302342
LOCATION: D1117

66.19

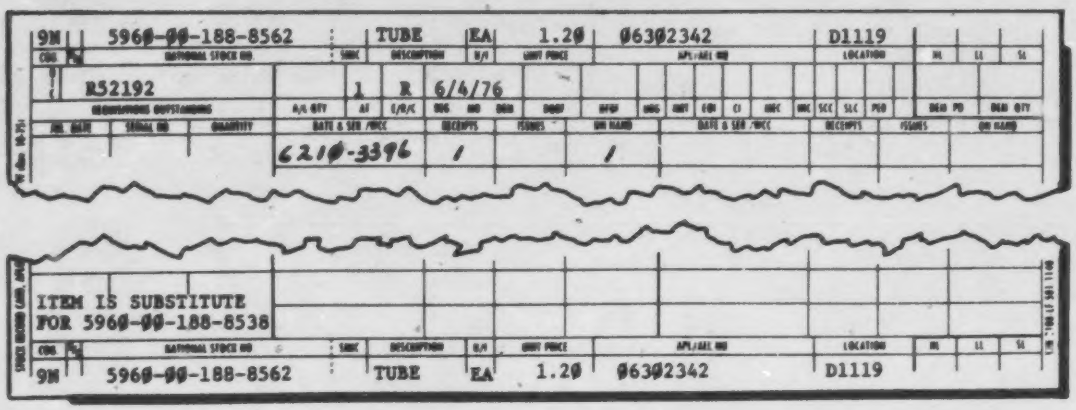
Figure 12-22.—Closing out superseded NSN stock record.

unit of issue, unit price, storage location, and a notation "ITEM IS SUBSTITUTE FOR NSN____" as shown in figure 12-23. Do not show an allowed quantity. Notate "SUBSTITUTE ITEM IS NSN____" in the lowest block of the REQUISITIONS OUTSTANDING column on the stock record for the primary item.

To determine replenishment quantities, review the computation of demand and frequency of demand of both stock records simultaneously.

Unit of Issue—When the unit of issue in the receipt document is different from that in the stock record, change the unit of issue in the

SUBSTITUTE ITEM



COG	NATIONAL STOCK NO	DESCRIPTION	U/I	UNIT PRICE	APL/AEL NO	LOCATION
9N	5960-00-188-8562	TUBE	EA	1.20	06302342	D1119

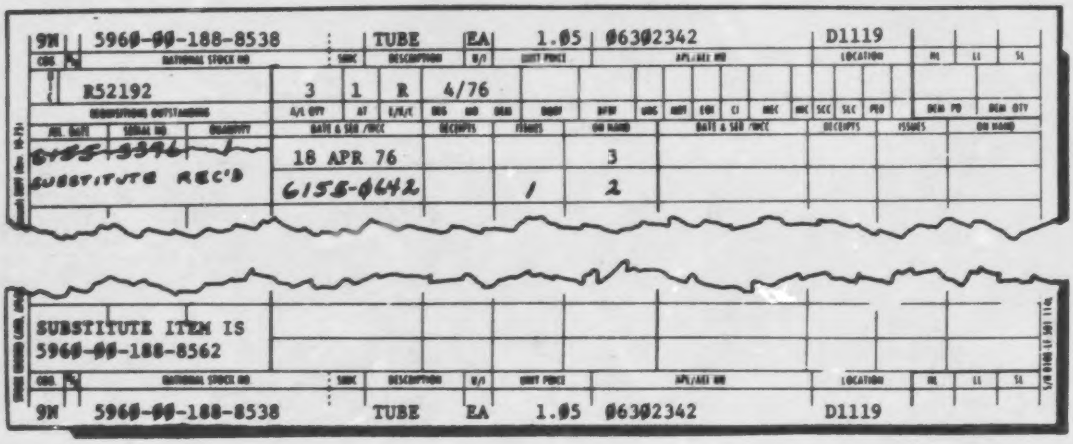
REQUISITIONS OUTSTANDING	A/L QTY	AT	E/R/C	DDG	MO	DDA
R52192		1	R	6/4/76		

DATE & SER /UICC	RECEIPTS	ISSUES	ON HAND
6210-3396	1		1

ITEM IS SUBSTITUTE
FOR 5960-00-188-8538

COG	NATIONAL STOCK NO	DESCRIPTION	U/I	UNIT PRICE	APL/AEL NO	LOCATION
9N	5960-00-188-8562	TUBE	EA	1.20	06302342	D1119

PRIMARY ITEM



COG	NATIONAL STOCK NO	DESCRIPTION	U/I	UNIT PRICE	APL/AEL NO	LOCATION
9N	5960-00-188-8538	TUBE	EA	1.05	06302342	D1119

REQUISITIONS OUTSTANDING	A/L QTY	AT	E/R/C	DDG	MO	DDA
R52192	3	1	R	4/76		

JUL. DATE	SERIAL NO	QUANTITY	DATE & SER /UICC	RECEIPTS	ISSUES	ON HAND
~~6155~~	~~3396~~	~~1~~	18 APR 76			3
SUBSTITUTE REC'D			6155-0642		1	2

SUBSTITUTE ITEM IS
5960-00-188-8562

COG	NATIONAL STOCK NO	DESCRIPTION	U/I	UNIT PRICE	APL/AEL NO	LOCATION
9N	5960-00-188-8538	TUBE	EA	1.05	06302342	D1119

66.19

Figure 12-23.—Posting action for substitute NSN.

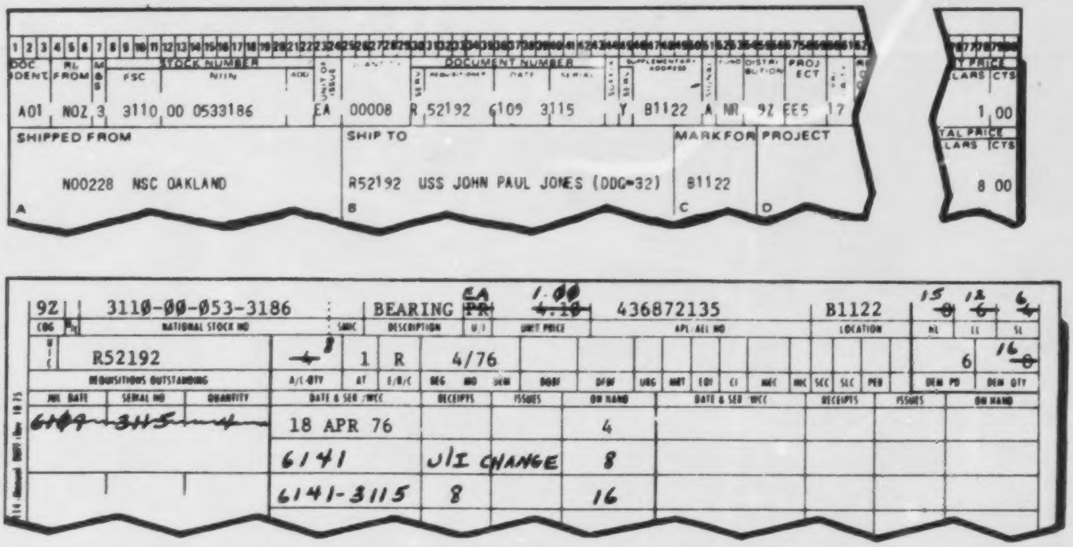
stock record accordingly. In addition, you may be required to adjust the allowance quantity, HL/LL/SL quantities (if a SIM item), and the on-hand balance in the stock record. If adjustment of the on-hand balance is required, enter the Julian date of the adjustment, the notation "U/I CHANGE," and the adjusted on-hand quantity before posting the receipt as illustrated in figure 12-24.

Unit Price—When the unit price in the receipt document differs, draw a single line through the old unit price, and enter the new unit price directly above (fig 12-24).

Quantity—When the total quantity requisitioned is not received and a suffix code is indicated in column 44 of the receipt document, post the quantity received to the stock record. Line out the requisitioned quantity in the REQUISITIONS OUTSTANDING column, and enter the quantity remaining outstanding next to the deleted quantity as illustrated in figure 12-25. However, if there is no suffix code indicated in column 44 of the receipt document, consider the requisition as being complete. If the unfurnished balance is still required, prepare a NAVSUP 1250 or 1250-1 to begin a new requisition.

A receipt overage exists if the receipt quantity is more than that requisitioned or invoiced. When a receipt overage exceeds $25 per line item, or if it involves controlled materiel (regardless of price), report the excess quantity as a receipt discrepancy on SF 364, Report of Item Discrepancy (ROID), under NAVSUP P-485. Only post the requisitioned quantity to the stock record as a receipt. The excess quantity, with a copy of the ROID attached, is set aside pending disposition instructions from the action addressee of the ROID. When a receipt overage does not exceed $25 or involve controlled materiel, store and post the total quantity received to the stock record. However, if retention of the excess quantity is not desired, you have to return it to the issuing activity or transfer it to an ashore supply activity under the procedures in NAVSUP P-485. In this case, only post the retained quantity to the stock record.

A receipt shortage exists if the receipt quantity is less than that invoiced. When a receipt shortage exceeds $25 per line item, or it involves



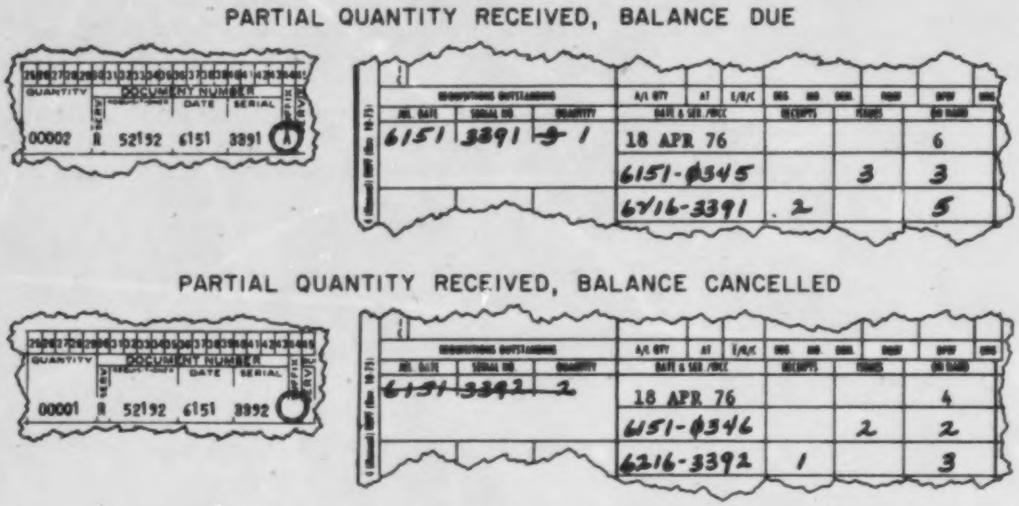
DOC IDENT: A01
RI FROM: NOZ
M & S: 3
STOCK NUMBER — FSC: 3110 NIIN: 00 0533186
UNIT OF ISSUE: EA
QUANTITY: 00008
DOCUMENT NUMBER: R 52192 6109 3115
SUFFIX: Y
SUPPLEMENTARY ADDRESS: B1122
A NR 9Z EE5 17
UNIT PRICE DOLLARS CTS: 1 00
SHIPPED FROM: N00228 NSC OAKLAND
SHIP TO: R52192 USS JOHN PAUL JONES (DDG-32)
MARK FOR: B1122
PROJECT
TOTAL PRICE DOLLARS CTS: 8 00

COG: 9Z
NATIONAL STOCK NO: 3110-00-053-3186
DESCRIPTION: BEARING
U/I: ~~PR~~ EA
UNIT PRICE: ~~4.10~~ 1.00
APL/AEL NO: 436872135
LOCATION: B1122
HL: ~~0~~ 15
LL: ~~6~~ 12
SL: ~~4~~ 6
REQUISITIONS OUTSTANDING: R52192
A/L QTY: ~~4~~ 8
AT: 1
E/R/C: R
4/76
DEM PD: 6
DEM QTY: ~~8~~ 16

JUL DATE	SERIAL NO	QUANTITY	DATE & SER / WCC	RECEIPTS	ISSUES	ON HAND
~~6109~~	~~3115~~	~~4~~	18 APR 76			4
			6141	U/I CHANGE		8
			6141-3115	8		16

123.178

Figure 12-24.—Posting unit of issue and unit price changes to stock records



PARTIAL QUANTITY RECEIVED, BALANCE DUE

QUANTITY 00002 · DOCUMENT NUMBER R 52192 6151 3891 · A

6151 3391 ~~9~~ 1

18 APR 76 — 6

6151-0345 — 3 — 3

6416-3391 — . 2 — 5

PARTIAL QUANTITY RECEIVED, BALANCE CANCELLED

QUANTITY 00001 · DOCUMENT NUMBER R 52192 6151 3892

~~6151 3392 2~~

18 APR 76 — 4

6151-0346 — 2 — 2

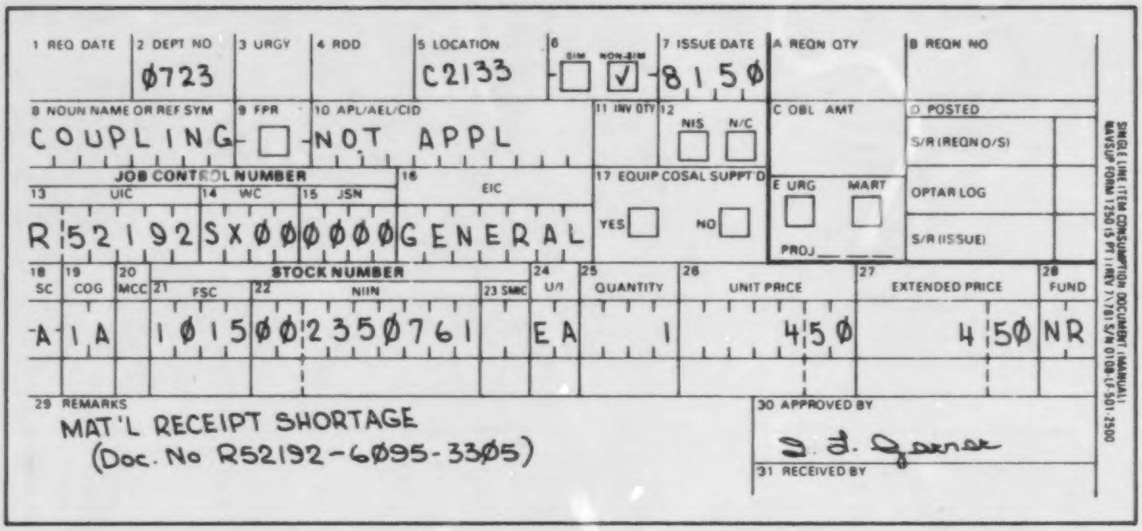
6216-3392 — 1 — 3

123.178

Figure 12-25.—Posting partial quantities to stock records.

controlled materiel (regardless of price), post the actual receipt quantity to the stock record. Report the deficient quantity as a receipt discrepancy. Keep a copy of the ROID and the applicable receipt document in the MOF until you receive replacement materiel or a credit invoice.

If the reply to the ROID is negative, prepare a NAVSUP 1250 or 1250-1 to report the receipt shortage as consumption under the Afloat Consumption, Cost, and Effectiveness Surveillance System (ACCESS) as shown in figure 12-26. When a receipt shortage does not exceed $25, or



1 REQ DATE
2 DEPT NO: 0723
3 URGY
4 RDD
5 LOCATION: C2133
6 SIM ☐ NON-SIM ☑
7 ISSUE DATE: 8150
A REQN QTY
B REQN NO
8 NOUN NAME OR REF SYM: COUPLING
9 FPR ☐
10 APL/AEL/CID: NOT APPL
11 INV QTY
12 NIS ☐ N/C ☐
C OBL AMT
D POSTED
S/R (REQN O/S)
JOB CONTROL NUMBER
13 UIC: R52192
14 WC: SX00
15 JSN: 0000
16 EIC: GENERAL
17 EQUIP COSAL SUPPT'D YES ☐ NO ☐
E URG ☐ MART ☐
PROJ __ __ __
OPTAR LOG
S/R (ISSUE)
18 SC: A
19 COG: 1A
20 MCC
STOCK NUMBER
21 FSC: 1015
22 NIIN: 002350761
23 SMIC
24 U/I: EA
25 QUANTITY: 1
26 UNIT PRICE: 4.50
27 EXTENDED PRICE: 4.50
28 FUND: NR
29 REMARKS: MAT'L RECEIPT SHORTAGE (Doc. No R52192-6095-3305)
30 APPROVED BY: S. J. Garner
31 RECEIVED BY

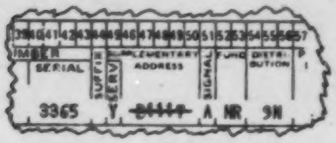
SINGLE LINE ITEM CONSUMPTION DOCUMENT (MANUAL)
NAVSUP FORM 1250 (5 PT) (REV 7/78) S/N 0108-LF-501-2500

17.84

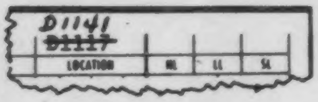
Figure 12-26.—Report of receipt shortage as consumption.

if the involved controlled materiel cannot be readily reconciled with the issuing activity, post the actual quantity received to the stock record. Then prepare NAVSUP 1250 or 1250-1 as previously discussed and illustrated.

Storage Location—When the receipted copy from the storeroom indicates the materiel was stored in a different location from that indicated in the stock record, line through the location shown in the record as indicated here.



SERIAL	SUFFIX	SERV	SUPPLEMENTARY ADDRESS	SIGNAL	FUND	DISTRIBUTION
3365		Y	~~D1117~~	A	NR	9N

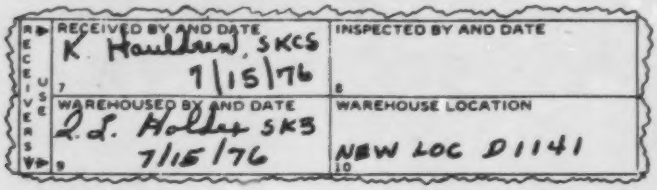


D1141

~~D1117~~

LOCATION

Enter the new location immediately in block 10. When the receipted copy

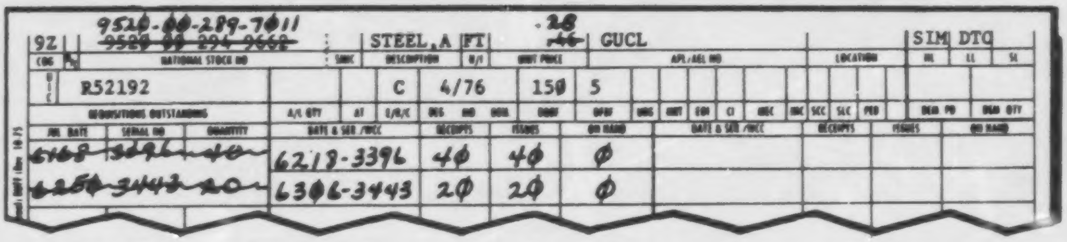


RECEIVERS USE		
	RECEIVED BY AND DATE 7 K. Haulthen, SKCS 7/15/76	INSPECTED BY AND DATE 8
	WAREHOUSED BY AND DATE 9 L. L. Holder SKS 7/15/76	WAREHOUSE LOCATION 10 NEW LOC D1141

indicates that an item is stored in multiple locations, enter them in the stock record as shown in figure 12-27.

After receipts have been posted to the stock records, forward the receipt documents to the OPTAR records custodian who enters the materiel receipt data in the Requisition/OPTAR log as directed in the Financial Management of Resources, NAVSO P-3013. Pass the receipt document to the requisitioner for attachment to the hardback copy of the related requisition from the MOF. Place both the receipt document and the hardback copy of the requisition in the MCF.

POSTING OF SIM-DTO MATERIEL.—When SIM-DTO materiel is received and turned over to custodial departments, post the receipt documents and related issue request simultaneously to the stock records maintained for SIM-DTO materiel. See the next illustration. The using and custodial departments initiate replenishment requisitions.



9Z

9520-00-289-7011

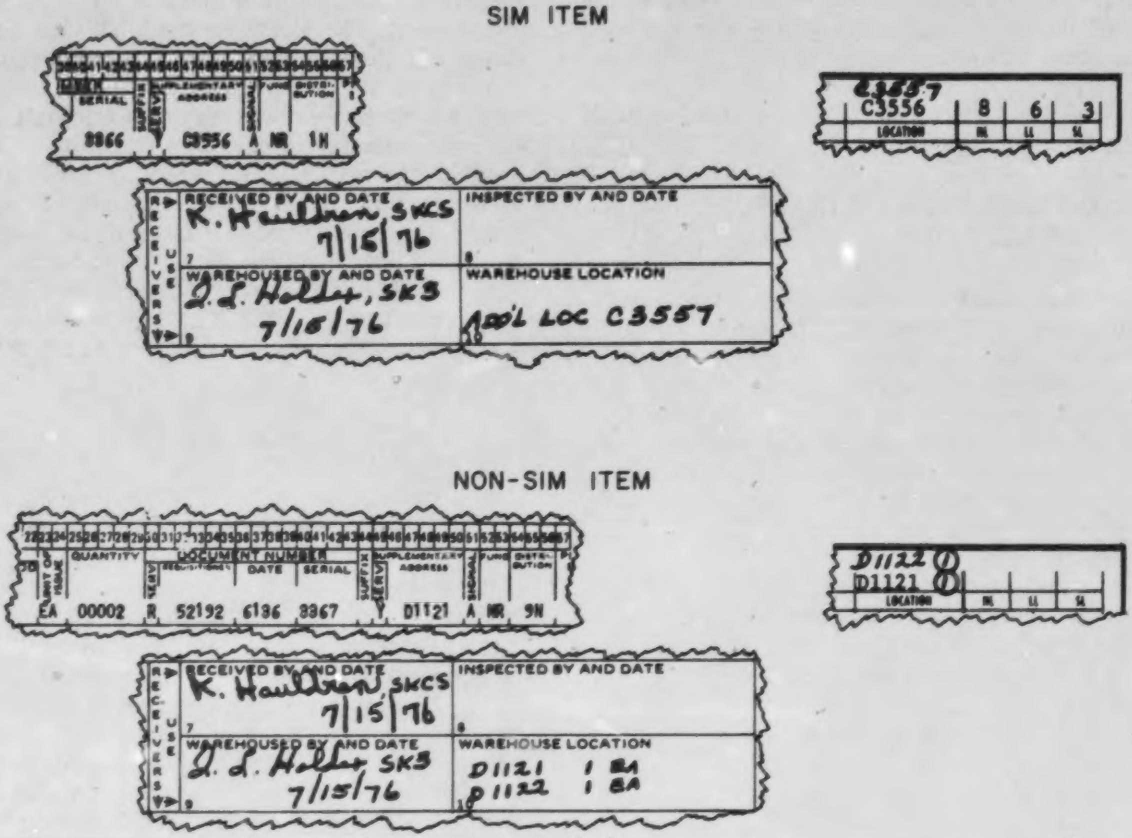
~~9520-00-294-9668~~

STEEL, A FT .28 ~~.46~~ GUCL

SIM DTO

R52192 C 4/76 150 5

REQUISITIONS OUTSTANDING			DATE & SER./MCC	RECEIPTS	ISSUES	ON HAND
~~6168~~	~~3396~~	~~40~~	6218-3396	40	40	0
~~6250~~	~~3443~~	~~20~~	6306-3443	20	20	0


SIM ITEM
SERIAL
SUFFIX
SERV
SUPPLEMENTARY ADDRESS
SIGNAL
FUND
DISTRIBUTION
LOCATION
NON-SIM ITEM
UNIT OF ISSUE
QUANTITY
DOCUMENT NUMBER
DATE
SERIAL
RECEIVERS USE

SIM ITEM

8866 Y C3556 A NR 1H

C3557
C3556 | 8 | 6 | 3

RECEIVED BY AND DATE: K. Haultren, SKCS 7/15/76

INSPECTED BY AND DATE

WAREHOUSED BY AND DATE: J. L. Holder, SKS 7/15/76

WAREHOUSE LOCATION: ADD'L LOC C3557

NON-SIM ITEM

EA 00002 R 52192 6136 8367 Y D1121 A NR 9N

D1122 ①
D1121 ①

RECEIVED BY AND DATE: K. Haultren, SKCS 7/15/76

INSPECTED BY AND DATE

WAREHOUSED BY AND DATE: J. L. Holder SKS 7/15/76

WAREHOUSE LOCATION:
D1121 1 EA
D1122 1 EA

123.178

Figure 12-27.—Posting additional locations to stock records.

Processing Completed DTO Materiel Receipt and Issue Documents.—After the issue date and signature of the recipient of DTO materiel have been entered in a receipt document, the following actions are required:

- Remove the related issue request and requisition documents from the NIS/NC file or MOF. In the original and green copy of the NAVSUP 1250 or the green copy of the NAVSUP 1250-1, enter the materiel issue date in data block 7. If required, change the quantity in data block 25 to that actually received.

- Determine whether a stock record is maintained for the item, post the receipt, and issue simultaneously.

- Put the original of the NAVSUP 1250 in the consumption file, and place the green copy of the NAVSUP 1250 or 1250-1 in the Maintenance Data Collection System (MDCS)/ACCESS file.

- Post the materiel issue date indicated in the receipt document to the Requisition/OPTAR log as directed by NAVSUP P-3013.

- Attach the hardback copy of the related requisition from the MOF to the receipt document.

- If the item received is controlled equipage, post the receipt to the Controlled Equipage Custody Record, NAVSUP 306. If the item is "Signature Required," obtain the department head's signature for the increased on-hand balance.

- File the receipt document and the hardback copy of the related requisition in the MCF.

CONTROLLED MEDICINALS AND NARCOTICS

The custodial responsibility of narcotics, alcoholic beverages, and dangerous drugs is vested in the commanding officer. An officer of the Medical Department, or in such an officer's absence, an officer designated by the commanding officer, will keep all unissued controlled substances in a separate locked compartment. Controlled substances include tranquilizers, alcoholic beverages, alcohol, hypnotics, excitants, and narcotics that require special custodial care. Medicinals are designated controlled substances by the symbol "Q" or "R" in the notes column of the Federal Supply Catalog or by the force medical officer.

Bulk Custodian

The commanding officer will appoint an officer of the Medical Department or another officer that he or she designates in writing as the bulk custodian. This officer will be responsible for, and maintain custody of, all bulk controlled substances.

Security

Access to controlled substances is limited to the bulk custodian and the senior Medical Department representative (SMDR). Only individuals whose official duties require access to such spaces will be provided the safe combinations.

Accountability

The bulk custodian and the SMDR are responsible for the receipt and custody of controlled substances. Each unit must maintain a detailed record of the receipt, transfer, survey, dispensing, and expenditure of controlled substances by entering information in a looseleaf binder. The sick call treatment log and health and dental records are examined against this record by the Controlled Substances Inventory Board. Facsimile signatures or initials on controlled substances records is prohibited. The SMDR is the custodian of the working stock and holds the combination to the working stock safe. Report losses to the nearest Drug Enforcement Agency (DEA) regional office as specified in MANMED 21-25. Dispose of deteriorated items as described in MANMED 21-26. Enter appropriate entries for losses or disposals in the Bulk Custodian's Log.

Inventory Board

Monthly or more frequently, if necessary, the Controlled Substances Inventory Board will take an inventory of controlled substances. The commanding officer will appoint the members of the board in writing. The board will consist of three members, at least two of whom will be commissioned officers. After the board conducts the monthly inventory, it will submit a report to the commanding officer. The officer having custodial responsibility cannot be a member of the board. On small ships and installations, the SMDR may be a board member.

Survey of Controlled Substances

Destroy controlled substances in the presence of at least one member of the survey board. Remove the amount destroyed from the stock records and the controlled substances log. Destroy items in a manner that ensures total destruction and prevents subsequent use. Destruction must be done in a manner that meets Federal, State, and local air and water pollution control standards.

PROPERTY SURVEYS

A survey is the procedure required by Navy Regulations when property must be condemned as a result of damage or deterioration; appraised for loss of utility; or acknowledged as nonexistent as a result of theft or loss. It is an administrative review of the condition of materiel, the cause of the condition, and the responsibility therefore. It is also an authorization to expend the materiel from the records, decrease the monetary value, or transfer materiel from the regular Federal group to a property disposal account.

Formal Survey

When a formal survey is required, the commanding officer will appoint a commissioned officer or civilian employee (GS-11 or higher) to conduct the survey. When circumstances warrant, as in the loss of high dollar value property or in cases where there might be criminal action or gross negligence, the commanding officer may appoint a board of three or more commissioned officers or civilians (GS-11 or higher) to conduct the survey.

The following individuals may not serve as survey board members:

- Commanding officer
- Person in whose custody the materiel is charged
- Person on whose records the materiel is carried

Informal Survey

An informal survey is conducted when a formal survey is not directed by the commanding officer. The survey is made by the department head having custody of the materiel to be surveyed.

PLANT PROPERTY

Plant property includes all real property either owned or accounted for by the Navy. It also includes personal property of a capital nature located in activities composing the Naval Shore Establishment or in plants of private contractors.

- Real Property—any interest in land or anything permanently attached to it, including structures, fixtures, and improvements

- Personal Property—a right or interest in anything movable or separate from real property

Plant property is divided into four classes for the purpose of management, financial and technical control, and related expenditures.

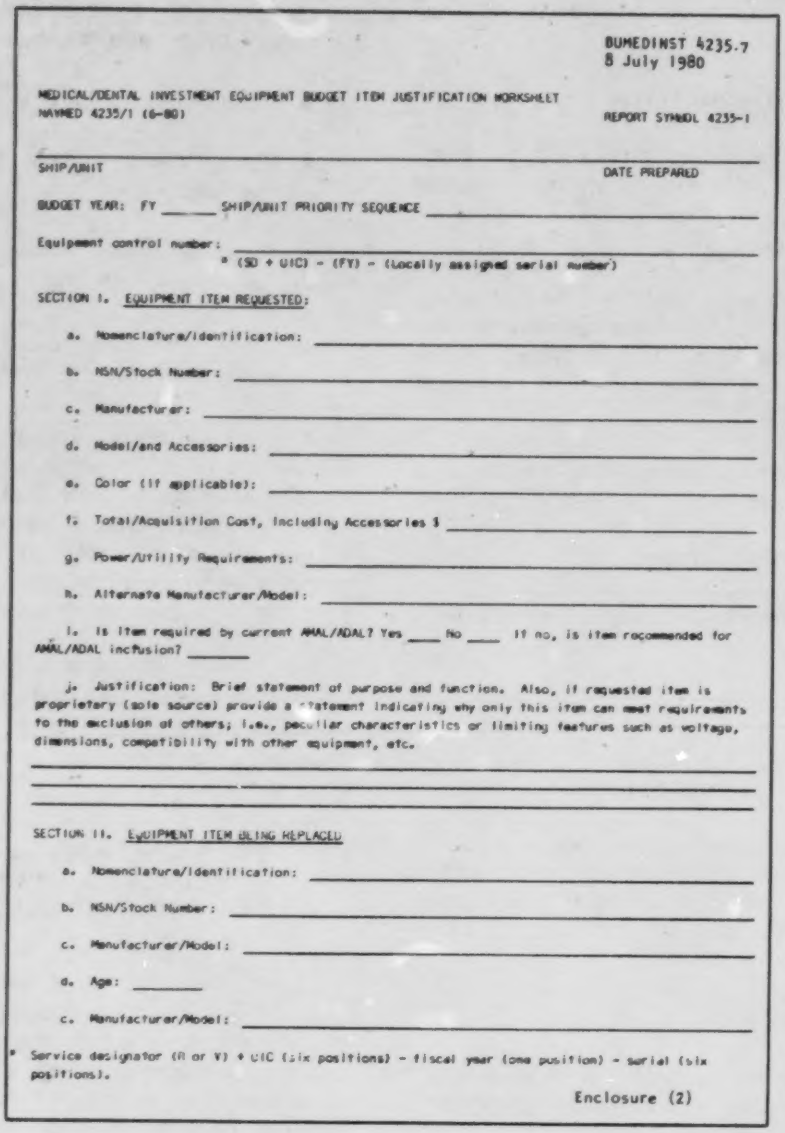
- Plant Property Class I—land
- Plant Property Class II—buildings and improvements
- Plant Property Class III—equipment (less industrial)
- Plant Property Class IV—industrial equipment

The accountability and reporting of plant property applies to all active, inactive, and standby activities of the Naval Shore Establishment. In some instances, the Operating Forces ashore must also account and report on plant property under their control. All classes of plant property must be inventoried every 3 years.

The Chief, BUMED, assists the Chief of Naval Materiel, NAVCOMPT, and the Naval Facilities Engineering Command administer the plant property system under his control.

PLANNING AND ACQUIRING MEDICAL AND DENTAL INVESTMENT EQUIPMENT

Each year the Navy spends considerable sums in purchasing new equipment. To ensure that needed items are obtained expeditiously requires long-range planning. The equipment you receive during your tour of duty may have been ordered by your predecessor, and what you order may not arrive until your replacement is on board. BUMEDINST 4235.7 contains the necessary information to determine the life expectancy of various types of medical and dental equipment. Figure 12-28 is an example of the form used to submit and justify your requirements.



BUMEDINST 4235.7
8 July 1980

MEDICAL/DENTAL INVESTMENT EQUIPMENT BUDGET ITEM JUSTIFICATION WORKSHEET
NAVMED 4235/1 (6-80)

REPORT SYMBOL 4235-1

SHIP/UNIT ____

DATE PREPARED ____

BUDGET YEAR: FY ____ SHIP/UNIT PRIORITY SEQUENCE ____

Equipment control number: ____
* (SD + UIC) - (FY) - (Locally assigned serial number)

SECTION I. EQUIPMENT ITEM REQUESTED:

a. Nomenclature/identification: ____

b. NSN/Stock Number: ____

c. Manufacturer: ____

d. Model/and Accessories: ____

e. Color (if applicable): ____

f. Total/Acquisition Cost, Including Accessories $ ____

g. Power/Utility Requirements: ____

h. Alternate Manufacturer/Model: ____

i. Is item required by current AMAL/ADAL? Yes ____ No ____ If no, is item recommended for AMAL/ADAL inclusion? ____

j. Justification: Brief statement of purpose and function. Also, if requested item is proprietary (sole source) provide a statement indicating why only this item can meet requirements to the exclusion of others; i.e., peculiar characteristics or limiting features such as voltage, dimensions, compatibility with other equipment, etc.

____

____

____

SECTION II. EQUIPMENT ITEM BEING REPLACED

a. Nomenclature/Identification: ____

b. NSN/Stock Number: ____

c. Manufacturer/Model: ____

d. Age: ____

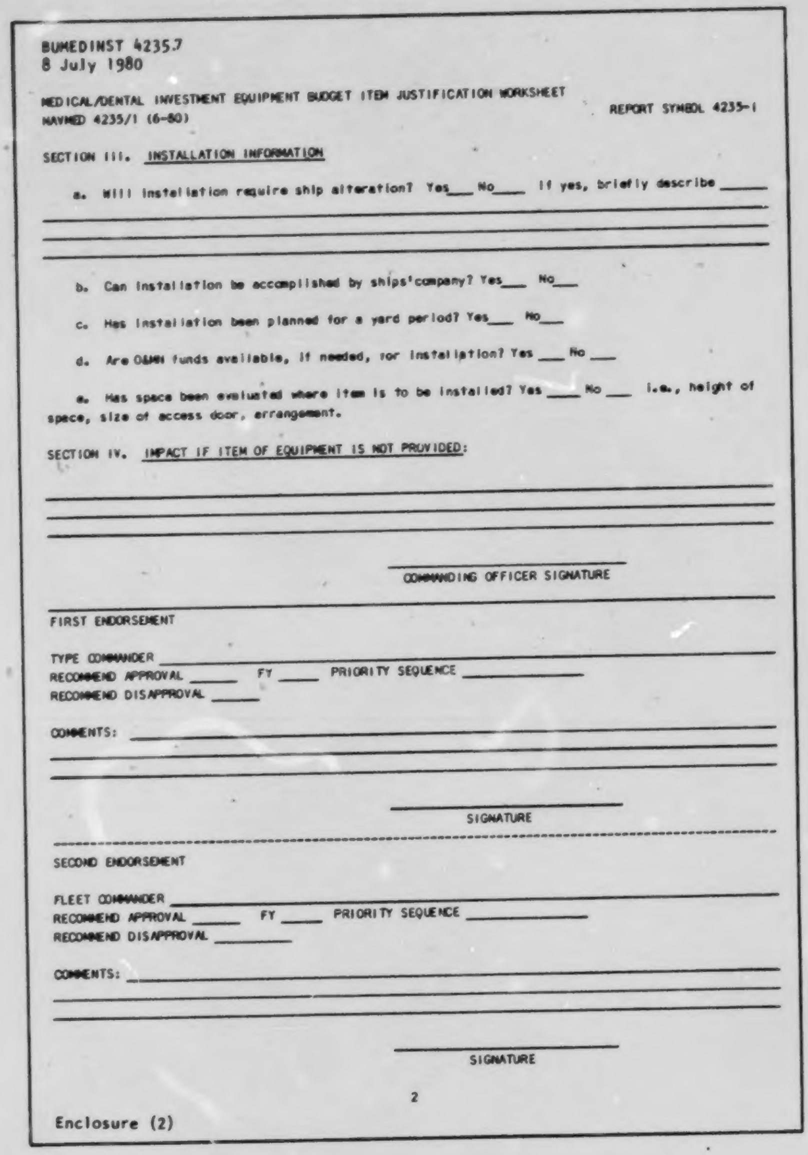
c. Manufacturer/Model: ____

* Service designator (R or V) + UIC (six positions) - fiscal year (one position) - serial (six positions).

Enclosure (2)

159.38A

Figure 12-28.—Medical and dental investment equipment justification form.



BUMEDINST 4235.7
8 July 1980

MEDICAL/DENTAL INVESTMENT EQUIPMENT BUDGET ITEM JUSTIFICATION WORKSHEET
NAVMED 4235/1 (6-80)
REPORT SYMBOL 4235-1

SECTION III. INSTALLATION INFORMATION

a. Will installation require ship alteration? Yes___ No___ If yes, briefly describe ______

b. Can installation be accomplished by ships'company? Yes___ No___

c. Has installation been planned for a yard period? Yes___ No___

d. Are O&MN funds available, if needed, for installation? Yes ___ No ___

e. Has space been evaluated where item is to be installed? Yes ____ No ___ i.e., height of space, size of access door, arrangement.

SECTION IV. IMPACT IF ITEM OF EQUIPMENT IS NOT PROVIDED:

COMMANDING OFFICER SIGNATURE

FIRST ENDORSEMENT

TYPE COMMANDER __________
RECOMMEND APPROVAL _____ FY ____ PRIORITY SEQUENCE __________
RECOMMEND DISAPPROVAL _____

COMMENTS: __________

SIGNATURE

SECOND ENDORSEMENT

FLEET COMMANDER __________
RECOMMEND APPROVAL _____ FY ____ PRIORITY SEQUENCE __________
RECOMMEND DISAPPROVAL ______

COMMENTS: __________

SIGNATURE

2

Enclosure (2)

159.38B

Figure 12-28.—Medical and dental investment equipment justification form—Continued.

Chapter 13

DECEDENT AFFAIRS

When a death occurs within a naval command, the Medical Department is usually called upon for assistance in the search, identification, and disposition of the remains.

At large commands or medical facilities, the Decedent Affairs Officers and their staffs provide these services. However, there are times when senior corpsmen, especially on independent duty, are more or less on their own. Therefore, a good general knowledge of Decedent Affairs procedures is essential.

All senior hospital corpsmen should have a working knowledge of the Decedent Affairs Manual, BUMEDINST 5360.1, which spells out the precise steps for care of the dead. This chapter merely highlights the manual; you must consult it for detailed information.

The remains for which the Navy is responsible are cared for in keeping with the highest traditions of the Navy and Marine Corps. Survivors of the deceased are given all possible consideration within the limits of existing statutes and directives. Recovery and identification of remains must be accomplished as rapidly as possible consistent with the highest standards of professional care. Information must be released as quickly as possible to the next of kin (NOK); minimum time should elapse between death and the return of remains to the survivors. Program procedures are coordinated at the departmental level to assure uniformity within DOD.

CASUALTY ASSISTANCE CALLS PROGRAM

Guidance for this program is provided in the Manual for Casualty Assistance Calls Program (CACP), BUPERSINST 1770.2, and the *Bureau of Naval Personnel Manual (BUPERSMAN)*, NAVPERS 15791B. Although this program is administered by the Commander, Naval Military Personnel Command (NMPC), and is not identified as part of the Decedent Affairs Program, it is closely related. It details the rights, benefits, and privileges to which the NOK of members who die or become missing while on active duty, or active or inactive duty for training are entitled to.

THE CURRENT DEATH PROGRAM

This program provides services concerning the care and disposition of the remains of persons who are eligible for these services by specific statute. It is operational on a worldwide basis during peacetime; it may continue in an area of conflict during major military operations depending on the tactical situation and logistical support capability.

CONCURRENT RETURN PROGRAM

This program combines the Current Death Program and Graves Registration (GR) Program. It originates as GR providing search, recovery, and evacuation of remains to a processing point and terminates in the Current Death Program requiring identification and preparation in a mortuary and transportation to a final destination designated by the primary next of kin. When terminated, the Concurrent Return Program will be phased into the Current Death Program or GR Program.

GRAVES REGISTRATION PROGRAM

When the situation permits, remains will be returned to the next of kin immediately, consistent with proper care of remains and transportation. When military operations reach a level where remains can no longer be handled under peacetime procedures, a directive will be issued suspending the Current Death Program in the specific geographic area. At this point, the Graves Registration Program will go into effect. While this program is similar to the Current Death Program, it also provides for temporary interment and subsequent disinterment, identification, casketing, and return of remains to the place designated by the NOK. Details of the program are contained in NAVMED P-5016 and NAVMC 2509-A, Handling of Deceased Personnel in Theaters of Operations.

ELIGIBILITY FOR DECEDENT AFFAIRS

Navy and Marine Corps members who expire while serving on active duty and who have not been dropped from the rolls of their organizations prior to their demise, are entitled to Decedent Affairs Program benefits. Generally, all persons under the jurisdiction of the Department of the Navy are entitled to some decedent benefits, i.e., bonafide dependents are entitled to transportation of remains at Government expense and civilian employees on TDY in CONUS or employed in overseas locations are entitled to certain limited Decedent Affairs Program benefits. For details see BUMEDINST 5360.1.

NOTIFICATION OF DEATH

When death occurs, the Personnel Casualty Report (Death), Report Symbol BUPERS 1770-4 Officer/Enlisted, is required. For missing personnel, the report is entitled "Personnel Casualty Report (Missing/Missing in action), Report Symbol BUPERS 1770-4 Officer/Enlisted."

A personnel casualty report is required on all Navy personnel, former members, dependents and members of other Armed Forces who expire on naval installations, and civilians who become casualties while serving with or attached to Navy commands. The report will be submitted by priority message by the commander or immediate senior in command of the unit that suffers the casualty. If the casualty occurs away from the member's command, the naval activity first contacted about the casualty will notify the member's command, NMPC, BUMED, the Judge Advocate General (JAG), the Regional Medical Office in the region where death occurred, and the Navy Finance Center, Cleveland, Ohio by priority message. The message will contain a request for the member's command to make a complete report. If the member's command is unknown, NMPC will be informed; an information copy of this notification will be sent to JAG. NMPC will then request that the member's command be contacted and requested to make a complete report. Deceased or missing members will be reported by priority message to NMPC, BUMED, the Regional Medical Office in the region where death or disappearance occurred (Refer to BUMEDINST 6320.32 series), and the commandant of the naval district in which the primary and secondary NOK reside; or (in case of a member's death) the senior naval commander of the area outside CONUS in which the primary and secondary NOK reside.

If the decedent was a Marine Corps member, follow notification procedures and message formats contained in the Marine Corps Casualty Procedures Manual (MARCORCASPROMAN), MCO P3040.4 series. Also notify the Regional Medical Office for coordination and contractual arrangements desired.

NOTIFICATION OF NEXT OF KIN

In all cases of death involving naval personnel, the NOK must be promptly notified in person by a uniformed Navy representative. The notification must be between the hours of 0600 and 2200 except when a member has been hospitalized in serious or very serious condition within CONUS and the NOK is already aware of the prognosis. In such cases, notification may be made by telephone. Every notification must be confirmed in writing. If undue delay in notification is foreseen (in excess of 24 hours from receipt of casualty information), notify NMPC by telephone.

Within CONUS, it is the responsibility of the member's CO to ensure that personal notification is made. Outside CONUS, NMPC will ensure that personal notification is made through the appropriate senior commander overseas.

See BUPERSMAN 4210100 for full details and examples of basic telegram formats for notification and confirmation of death. The formats are presented for guidance only and rigid adherence is not required; however, the formats should not be unnecessarily altered.

Condolence Letter

With the exception of personnel missing in action and those cases in which the primary or secondary NOK is criminally charged in the member's death, COs will write a letter to the primary and secondary NOK in all cases within 48 hours of the casualty. The letter, in addition to expressions of condolence, should contain appropriate details of the casualty; however, no details should be included which are likely to aggravate or distress the NOK. A copy of the letter must be sent to NMPC and OJAC (Investigations Division).

Autopsy Reports

An autopsy will be performed on the remains of all persons who die on active duty or active duty for training when the CO deems such procedure necessary. The CO's request for an autopsy may be self-initiated or based upon the recommendation of an investigating officer, other fact-finding body, or medical officer. An autopsy may be necessary to determine the true cause of death, to get information for completing military records, or to protect the welfare of the military community.

The Manual of the Medical Department states that when an aircrew member dies while serving as an aircrew member on a military aircraft, the medical officer will recommend to the CO that an autopsy be performed to determine the cause of death. The cause of the death in these cases is interpreted to mean any correlation between pathological evidence and the accident cause factor.

When an autopsy is deemed necessary for retired personnel or nonmilitary persons who die at a naval treatment facility or at a Navy installation, written authorization from the NOK must be obtained before the autopsy is performed. The request for autopsy should be incorporated in the casualty notification as directed in BUMEDINST 5360.1.

SEARCH, RECOVERY, AND IDENTIFICATION

The need of these operations usually results from an act of violence such as an aircraft accident, fire, or explosion. Incidents of this nature require the designation of an administrative fact-finding body such as a Board of Investigation or Court of Inquiry. Usually this responsibility is delegated to the naval activity having necessary capabilities at or nearest the scene of the disaster. The physical conduct of search and recovery operations is part of the fact-finding body's function. If identification problems arise concerning a death within CONUS and these cannot be resolved locally, the Naval Regional Medical Officer (formerly DMO) concerned and BUMED will be advised immediately by telephone or priority message. If the death occurs outside CONUS, the death will be reported by priority message. The Commandant of the Marine Corps (CMC) must be notified when a marine dies. If the death involves a member of another service, BUMED should be notified by priority message for coordination.

RECOVERY AND IDENTIFICATION PROCESSING

The recovery and identification of remains should be accomplished as directed in BUMEDINST 5360.1. When the CO is satisfied that identification is established beyond doubt and documented accordingly, the remains may be considered identified. All remains except those that have been positively identified and are anatomically complete will require additional study and processing by an identification specialist. BUMED will establish final conclusions and take action required for final disposition of these remains if shipped from outside CONUS to CONUS. Disposition of unidentified remains will be directed by BUMED or CMC as appropriate.

Final conclusions will result in one of the following determinations after a thorough study of all evidence:

a. Identified remains
b. Unidentified, but believed to be a specific individual
c. Unidentified remains
d. Group remains, known individuals
e. Group remains, unknown individuals

Every effort will be made to ensure that all remains have been recovered. However, if additional portions of human remains are recovered from the site of a disaster after initial release of the remains, all supplementary information will be sent by priority message to BUMED. No information will be released to the NOK, family, or news media unless directed by BUMED. Personal effects found on or with remains, after having served all identification purposes, will be disposed of in accordance with current instructions contained in the NAVSUP Manual or MARCORCASPROMAN as appropriate.

When search, recovery, and identification operations continue for more than 36 hours, chronologically numbered progress reports (Search, Recovery, and Identification Operations Progress Report, Report Symbol MED 5360-6) will be dispatched every 24 hours to BUMED with appropriate information addressees as directed by BUMEDINST 5360.1.

PROCURING MORTUARY SERVICES

Mortuary services include all necessary supplies and services required in the removal, preservation, clothing, casketing, and cremation or interment of the remains of individuals eligible for Decedent Affairs benefits. Mortuary services within CONUS are provided by naval activities through (1) annual contracts awarded to funeral directors serving the local area of activities anticipating 10 or more deaths per year, (2) individual purchase orders issued where an annual contract is not in effect, or (3) private arrangements made by the NOK subject to reimbursement.

The NOK should be tactfully encouraged to allow the Navy to make all primary care arrangements since greater benefits can be furnished through our procedures. For full information concerning procedures and authorized items, see BUMEDINST 5360.1.

PREPARING AND PROCESSING REMAINS

It is imperative that preservative treatment be started as soon as possible after death. The naval authority having decedent affairs responsibility should maintain close coordination with appropriate military or civilian authorities to assure prompt release and delivery of the remains to the mortuary facility. All remains must be prepared under approved high standards of the mortuary profession and returned to the final destination in their most normal, lifelike appearance.

Government mortuary facilities are located in various overseas areas and have the responsibility to furnish mortuary services for all eligible categories of military and civilian personnel. For location of these facilities see BUMEDINST 5360.1.

When death occurs in areas not listed, assistance should be requested from the senior naval command. In some areas the State Department may be able to assist. The senior naval command may also be able to arrange airlift of remains from place of death to a point where Government or commercial mortuary facilities are available or dispatch an embalmer from an overseas Government mortuary to the place of death.

INITIAL PREPARATION

For guidance on basic preservation techniques in remote overseas areas or aboard ship where Navy approved contractors or U.S. licensed embalmers are not available, see BUMEDINST 5360.1.

Refrigeration

Remains may be preserved by refrigeration for short periods pending arrival of a vessel at a port where necessary facilities are available. To minimize cellular deterioration, remains should be refrigerated above the freezing point at 36° to 40° F.

Certificate of Death (Overseas), DD-2064

When remains are transported to another overseas area or to a port of arrival in CONUS, three signed copies of the DD-2064 must accompany the remains. For specific information concerning preservation, casketing, and shipping of remains, see BUMEDINST 5360.1.

CREMATION

When requested in writing and/or by telegram, cremation is authorized subject to compliance with civil regulations. No overt action by naval authorities should be made to encourage NOK to elect cremation. Cremation will not be permitted if any question exists whether a specific individual has the legal right to direct disposition of the remains. Details concerning cremation are contained in BUMEDINST 5360.1.

AT SEA DISPOSITION

Eligibility—refer to BUMEDINST 5360.1 series. In CONUS, Requests for committal of intact remains or cremains at sea or for dispersal of cremains by aircraft should be referred to the Naval Regional Medical Office for the district in which the requested port is located. Outside CONUS, the Staff Medical Officer of the fleet Commander-in-Chief or area commander can coordinate arrangements for such disposition. Cases which cannot be resolved at the delegated authority level will be referred to the Chief of Naval Operations (CNO) for disposition.

TRANSPORTATION OF REMAINS

It is the responsibility of the activity arranging the transportation to provide confirmed schedule activity to provide transportation as expeditiously as possible by whatever method meets the requirements. Consideration should be given to any special desires of the NOK including releasing the remains for transportation that they may provide.

AUTHORIZED METHODS OF TRANSPORTATION WITHIN THE UNITED STATES

By Rail

In most parts of the U.S., remains may be transported as baggage, but this method of transportation is rarely used anymore. However, when used, two first-class tickets are required for the remains. When an escort is used, a seperate first-class ticket is used for the escort; this may require a round-trip ticket for the escort if return is to be by rail.

By Commercial Air

Commercial air may be supplemented by either rail or funeral coach transportation. The escort must travel with the remains. If delays enroute or changes in schedule occur, the escort must notify the installation arranging the transportation and the consignee.

By Funeral Coach

This method may be used:

1. If a common carrier is not available.
2. If a common carrier is available only part of the way to the city designated by the NOK, for the remaining portion of the transportation authorized.
3. If the cost is not in excess of the common carrier cost.
4. As a continuation of common carrier service when remains are consigned directly to a national cemetery or to a Navy cemetery or plot, and the cemetery cannot provide transportation from the terminal to the cemetery.
5. For transfer of remains from the place of preparation to another local funeral home, to a local cemetery, or to a common carrier terminal.
6. When requested by the NOK and they defray costs in excess of the method that would have been used by the Government.

TRANSPORTATION OF CREMATED REMAINS (CREMAINS)

Cremains of active duty military personnel will be hand-carried by an escort using commercial air, rail, or funeral director's or other appropriate vehicle. Cremains of other than active duty military personnel may be forwarded by common carrier, express, parcel post, or Government transportation.

AUTHORIZED TRANSPORTATION TO OR FROM CONUS

Remains of eligible decedents will be transported by the most expeditious U.S. Government facilities; normally Government air (MAC flights) is used. If such transportation is not available, impractical, or would cause undue delay, commercial air may be authorized.

If transportation of remains is being made between two activities outside the U.S., or from an outside activity to the U.S., three copies of DD 2064 and any other required forms must be securely attached to, or enclosed securely in, the head envelope attached to the modern outer case. From the U.S. to a point outside the U.S., three certified copies of the civilian certificate of death will be procured.

SPECIAL TRANSPORTATION REQUIREMENTS

Remains of Contagious Disease Victims

Such remains must be prepared as local requirements dictate and placed in a hermetically and permanently sealed metal casket. The human remains transfer case is adequate for returning such remains from overseas areas if a polyethylene wrap is used as explained in BUMEDINST 5360.1. In all localities, the same diseases are not classified as communicable or contagious; accordingly, civil health authorities should be consulted to determine the requirements.

Disinterred Remains

Remains may be disinterred and transported at Government expense when temporary interment was required without the consent of the person designated to direct disposition of the remains. However, if interment was directed by the NOK, subsequent disinterment and transportation of the remains will not be at Government expense except upon specific authorization of BUMED. Special permission of local health authorities must be obtained before the remains may be disinterred and transported to another locality.

Disinterred remains will be enclosed in hermetically sealed metal caskets or metal-lined outer cases. A Navy transfer case may be substituted for a casket when transporting remains from outside CONUS to CONUS.

TRANSPORTING REMAINS DURING YEAR-END AND HOLIDAYS

Unless specifically requested by the NOK, remains will not be shipped to arrive at a destination on Thanksgiving Day, 22 through 26 December, or 1 January. A definite understanding should be reached with the NOK.

ESCORTS

Escorts are provided to accompany remains to ensure prompt safe delivery as a mark of respect to the decedent and as an indication of the Navy's desire to help the NOK. Only one escort is authorized; however, more than one may be assigned if not used concurrently.

Within CONUS, an escort will be detailed to accompany the remains or cremains of each Navy and Marine Corps decedent to the final destination. Arranging for the escort is the responsibility of the activity arranging the transportation. This may be coordinated with the last duty station of the deceased.

When remains are consigned to a place outside CONUS where Armed Forces representatives or other Government officials are not available to receive, transfer, or otherwise assist in transportation arrangements, military escorts will be provided.

Unless a special escort is authorized, remains transported via MAC aircraft from a point outside CONUS to a CONUS port of entry will not be accompanied by an escort. The escort will be detailed by the military activity responsible for transportation arrangements at the CONUS port of entry.

Problems concerning arrangements for a Navy escort that cannot be resolved by the responsible command should be referred to the commandant of the naval district in CONUS or the responsible area commander outside CONUS. All problems concerning Marine Corps escorts will be referred to the CMC.

Any Navy member on active duty may serve as an escort. Navy members who volunteer may be acceptable if they meet criteria indicated for selection of regular escorts. If desired by the NOK, a specifically named civilian or member of another service may be assigned as an escort. An escort in retired or inactive status should be treated as a civilian.

Within CONUS, special escorts requested by the NOK will be permitted whenever possible. Requests for special escorts to accompany remains shipped from overseas to CONUS, from CONUS overseas, or between two overseas points can only be granted when the person requested is closely related to the decedent.

SELECTION OF THE ESCORT

Unless a special escort is requested by the NOK, the escort should be of the same branch of service, status, and paygrade as the deceased. The escort should be a friend of the deceased from the same unit and preferably of the same religion wherever possible.

DUTIES OF THE ESCORT

A naval escort is a representative of the Navy who will be required to perform services of a very special and personal nature. It is very important that these duties are thoroughly explained to the escort before such duty starts. Providing instruction to the escort is the responsibility of the command arranging transportation of the remains. The Manual for Escorts of Deceased Navy Personnel, NAVPERS 15955, will assist in this function. For additional information see BUMEDINST 5360.1.

DISPOSITION OF PERSONAL EFFECTS

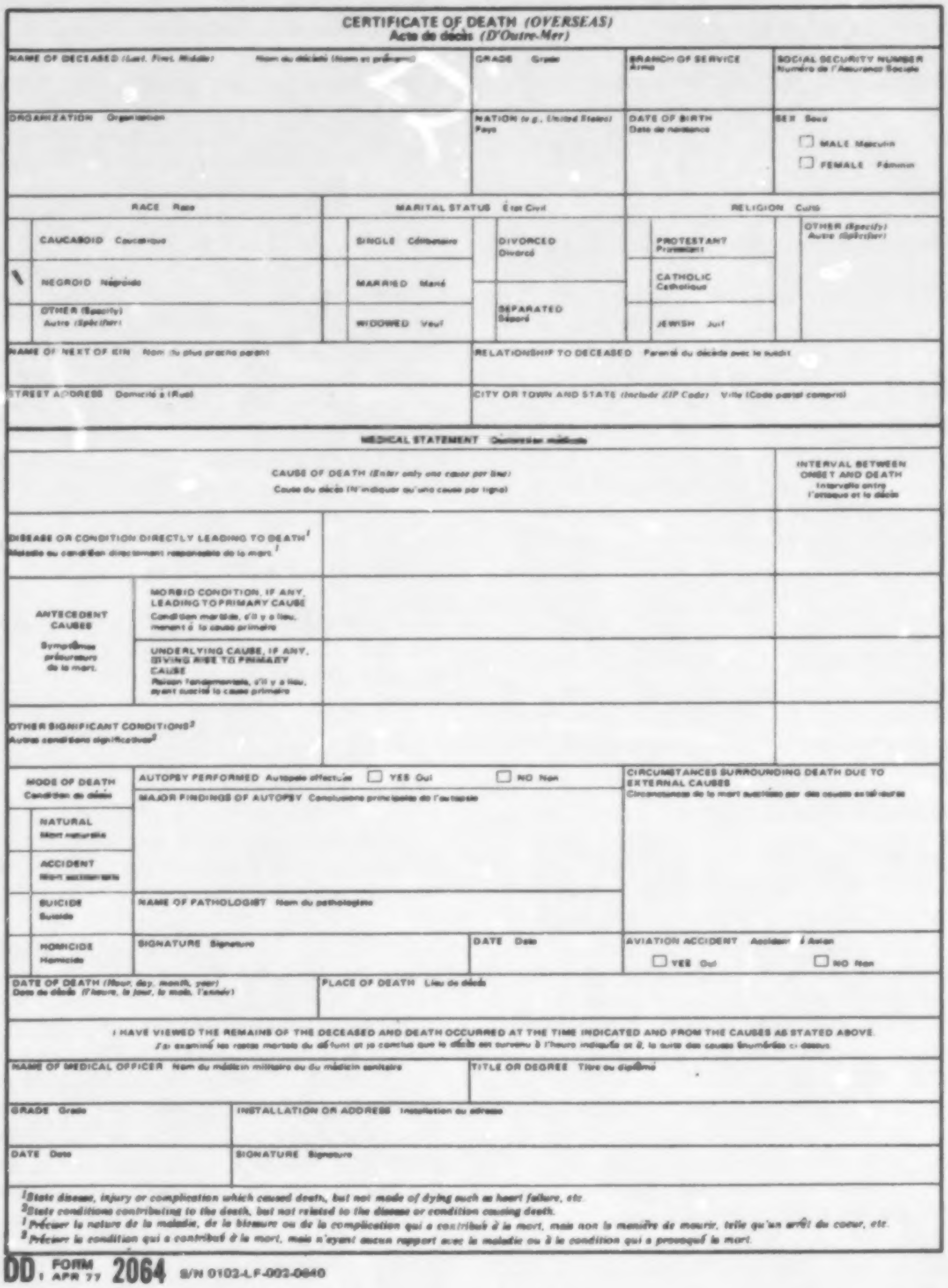
The CO will order all personal effects of the deceased to be collected and inventoried except where the member occupies Government or public housing and the spouse requires no assistance. In the event the spouse dies simultaneously with the service member, the CO will cooperate with any surviving relatives of the deceased and civil authorities in providing protection for the property of the deceased.

The CO will appoint an inventory board consisting of two members. Normally, one member is a commissioned officer. The inventory will be recorded on an Inventory of Personal Effects Form, NAVSUP Form 29. An original and four copies will be prepared, duly attested, and signed by the board members. The board will send all five copies with the personal effects to the supply officer for completion, disposition, and signature. The supply officer will return three signed copies. The inventory board will send one copy to NMPC, file one in the service record of the deceased, and send one to the officer who appointed the board.

CIVIL CERTIFICATES OF DEATH

A civil certificate of death must be obtained if a death occurs within one of the 50 United States or the District of Columbia. If the death occurs outside these areas, with the exception of Guam, a Certificate of Death (Overseas), DD 2064, must be prepared. See figures 13-1 and 13-2. This is in addition to the civil certificate of death; however, the civil certificate of death is not required in all overseas areas. Civil authorities should be consulted to determine local requirements. When a death occurs at a naval activity in any state, territory, or insular possession of the U.S., the CO will report the death to civil authorities (usually the coroner or medical examiner). It is a general practice to complete a civil certificate of death for all deaths occurring in naval medical facilities.

The medical officer or the Medical Department representative of the ship or station to which the deceased was attached will obtain the certificate from civil authorities. If requested by the authorities, the civil certificate of death may be prepared and signed by a naval medical officer. If problems arise in getting a certificate, the assistance of the Naval Regional Medical Office for the district in which the death occurred should be requested. If death occurs abroad and



CERTIFICATE OF DEATH *(OVERSEAS)*
Acte de décès *(D'Outre-Mer)*

NAME OF DECEASED *(Last, First, Middle)* Nom du décédé (Nom et prénoms)
GRADE Grade
BRANCH OF SERVICE Arme
SOCIAL SECURITY NUMBER Numéro de l'Assurance Sociale

ORGANIZATION Organisation
NATION *(e.g., United States)* Pays
DATE OF BIRTH Date de naissance
SEX Sexe ☐ MALE Masculin ☐ FEMALE Féminin

RACE Race
- CAUCASOID Caucasique
- NEGROID Négroïde
- OTHER *(Specify)* Autre *(Spécifier)*

MARITAL STATUS État Civil
- SINGLE Célibataire
- MARRIED Marié
- WIDOWED Veuf
- DIVORCED Divorcé
- SEPARATED Séparé

RELIGION Culte
- PROTESTANT Protestant
- CATHOLIC Catholique
- JEWISH Juif
- OTHER *(Specify)* Autre *(Spécifier)*

NAME OF NEXT OF KIN Nom du plus proche parent
RELATIONSHIP TO DECEASED Parenté du décédé avec le susdit

STREET ADDRESS Domicile à (Rue)
CITY OR TOWN AND STATE *(Include ZIP Code)* Ville (Code postal compris)

MEDICAL STATEMENT Déclaration médicale

CAUSE OF DEATH *(Enter only one cause per line)*
Cause du décès (N'indiquer qu'une cause par ligne)

INTERVAL BETWEEN ONSET AND DEATH
Intervalle entre l'attaque et le décès

DISEASE OR CONDITION DIRECTLY LEADING TO DEATH[1]
Maladie ou condition directement responsable de la mort[1]

ANTECEDENT CAUSES
Symptômes précurseurs de la mort.

MORBID CONDITION, IF ANY, LEADING TO PRIMARY CAUSE
Condition morbide, s'il y a lieu, menant à la cause primaire

UNDERLYING CAUSE, IF ANY, GIVING RISE TO PRIMARY CAUSE
Raison fondamentale, s'il y a lieu, ayant suscité la cause primaire

OTHER SIGNIFICANT CONDITIONS[2]
Autres conditions significatives[2]

MODE OF DEATH Condition du décès
- NATURAL Mort naturelle
- ACCIDENT Mort accidentelle
- SUICIDE Suicide
- HOMICIDE Homicide

AUTOPSY PERFORMED Autopsie effectuée ☐ YES Oui ☐ NO Non

MAJOR FINDINGS OF AUTOPSY Conclusions principales de l'autopsie

NAME OF PATHOLOGIST Nom du pathologiste

SIGNATURE Signature
DATE Date

CIRCUMSTANCES SURROUNDING DEATH DUE TO EXTERNAL CAUSES
Circonstances de la mort suscitées par des causes extérieures

AVIATION ACCIDENT Accident d'Avion ☐ YES Oui ☐ NO Non

DATE OF DEATH *(Hour, day, month, year)*
Date du décès *(l'heure, le jour, le mois, l'année)*
PLACE OF DEATH Lieu du décès

I HAVE VIEWED THE REMAINS OF THE DECEASED AND DEATH OCCURRED AT THE TIME INDICATED AND FROM THE CAUSES AS STATED ABOVE.
J'ai examiné les restes mortels du défunt et je conclus que le décès est survenu à l'heure indiquée et à, la suite des causes énumérées ci-dessus.

NAME OF MEDICAL OFFICER Nom du médecin militaire ou du médecin sanitaire
TITLE OR DEGREE Titre ou diplôme

GRADE Grade
INSTALLATION OR ADDRESS Installation ou adresse

DATE Date
SIGNATURE Signature

[1] *State disease, injury or complication which caused death, but not mode of dying such as heart failure, etc.*

[2] *State conditions contributing to the death, but not related to the disease or condition causing death.*

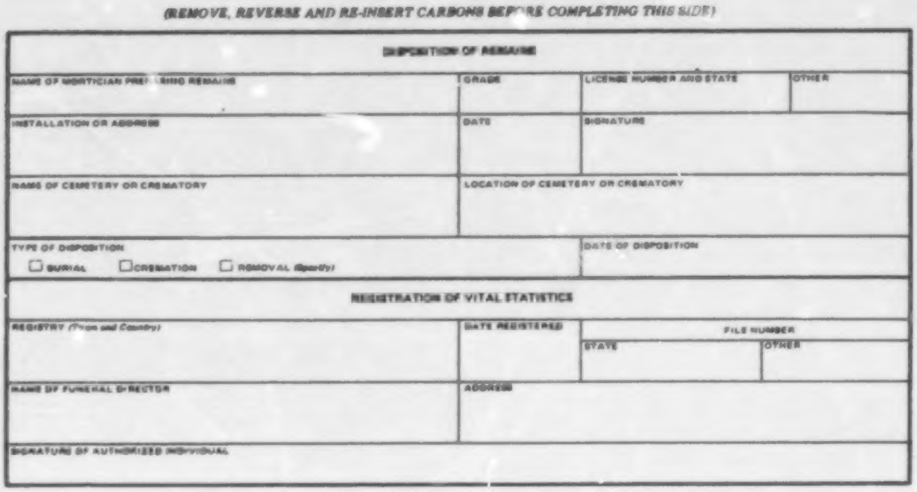
[1] *Préciser la nature de la maladie, de la blessure ou de la complication qui a contribué à la mort, mais non la manière de mourir, telle qu'un arrêt du coeur, etc.*

[2] *Préciser la condition qui a contribué à la mort, mais n'ayant aucun rapport avec la maladie ou à la condition qui a provoqué la mort.*

DD FORM 1 APR 77 2064 S/N 0102-LF-002-0640

159.30

Figure 13-1.—DD 2064, Certificate of Death (Overseas) (Front).



(REMOVE, REVERSE AND RE-INSERT CARBONS BEFORE COMPLETING THIS SIDE)

DISPOSITION OF REMAINS

NAME OF MORTICIAN PREPARING REMAINS
GRADE
LICENSE NUMBER AND STATE
OTHER
INSTALLATION OR ADDRESS
DATE
SIGNATURE
NAME OF CEMETERY OR CREMATORY
LOCATION OF CEMETERY OR CREMATORY
TYPE OF DISPOSITION
☐ BURIAL ☐ CREMATION ☐ REMOVAL (Specify)
DATE OF DISPOSITION

REGISTRATION OF VITAL STATISTICS

REGISTRY (Town and Country)
DATE REGISTERED
FILE NUMBER
STATE
OTHER
NAME OF FUNERAL DIRECTOR
ADDRESS
SIGNATURE OF AUTHORIZED INDIVIDUAL

159.31

Figure 13-2.—DD 2064, Certificate of Death (Overseas) (Back).

no naval activity is available, the nearest consular officer should be requested to get a certificate. The medical officer or Medical Department representative will prepare and forward a DD 2064 with the civil certificate of death, supporting papers, and the closed Health Record.

In general (except where the state has retained concurrent jurisdication with the U.S.), civil authorities have no jurisdiction over deaths occurring on naval reservations. However, a transit or burial permit must be obtained from civil authorities to remove the remains from a naval reservation either for shipment or burial. If death of any person for whom the Department of the Navy has responsibility occurs outside the limits of a naval reservation, the remains normally will not be moved until permission has been received from civil authorities.

DISTRIBUTION OF COPIES

1. When death occurs to a Navy or Marine Corps member in one of the 50 United States or the District of Columbia, follow local civil requirements. In addition:

a. For active duty decedents, one copy of the civil certificate of death is sent with the closed Health Record and one copy is sent to the Commanding Officer, Naval Medical Data Services Center, Bethesda MD 20014.

b. For inactive duty Navy decedents, one copy is sent to the Naval Reserve Personnel Center, 4400 Dauphine St., New Orleans LA 70149.

c. For active and inactive duty Marine Corps decedents, one copy is sent to the Commandant of the Marine Corps, Code MSPA-1, Department of the Navy, Washingtion DC 20380.

d. For other deaths, follow local civil requirements.

2. When death occurs outside the 50 United States or the District of Columbia, follow local

civil requirements. In addition, a DD 2064 is prepared and copies are distributed as follows:

a. For active duty decedents, the original is placed in the closed Health Record and one copy is sent to the Naval Medical Data Services Center as in "a" of item 1 above.

b. For inactive duty decedents, the distribution is the same as in "b" and "c" of item 1 above.

c. For other deaths, one copy is sent to the command indicated if the death occurred aboard a ship, at a naval station, or on a naval aircraft. For full details and addresses of these activities, refer to MANMED 17.

When death occurs outside CONUS, three signed copies of DD 2064 will accompany the remains to CONUS. When death occurs within CONUS, three certified copies of the civil certificate of death will accompany the remains from CONUS to outside CONUS along with all other forms required in BUMEDINST 5360.1

NOTE: A certificate of death will not be prepared for persons listed as missing.

PAYMENTS AND COLLECTIONS

PRIMARY EXPENSES (MORTUARY SERVICES)

If the NOK makes arrangements for disposition of the remains rather than using services of DOD or completes funeral arrangements before DOD services are offered, the amounts outlined below are allowed toward incurred expenses. The figures quoted are subject to change, so check BUMEDINST 5360.1 for the latest authorized allowances.

When an Armed Forces contract or mortuary is available but not used, an amount not to exceed what procurement would have cost the Navy over and above the contract expenses are allowable.

When an Armed Forces contract or mortuary is not available, an amount not to exceed $500 may be paid.

TRANSPORTATION EXPENSES

If the NOK arranges for transportation of the remains, reimbursement may be made in an amount not to exceed what transportation would have cost the Government. If the Navy has arranged for transportation and the final destination cannot be reached by common carrier, reasonable costs may be allowed for supplemental transportation by funeral coach or other vehicle.

INTERMENT EXPENSES

Funeral and Burial Expenses

The following allowances may be made toward interment expenses incurred by the NOK.

a. If burial is made in a private cemetery, an amount not to exceed $900 is authorized.

b. If remains are consigned to a funeral director selected by the NOK before burial in a national or other Federal Government cemetery or committal at sea, an amount not to exceed $475 is authorized.

c. If remains are consigned directly to a national or other Federal Government cemetery or to a naval activity or ship for committal at sea, an amount not to exceed $75 is authorized.

Memorial Service

When the remains of eligible military personnel, whose determination of death has been made, are nonrecoverable, reimbursement to the primary NOK or their designee may be made for memorial service expenditures not to exceed $475. A claim for reimbursement may be allowed only if presented within 2 years after the determined date of death. The primary NOK must submit receipted invoices or a certified claim in five copies to the Naval Regional Medical Office for the region in which the memorial service was held. Amounts claimed must not exceed the amounts actually expended and may not exceed the maximum authorized, regardless of the amount expended.

PROCEDURES FOR REIMBURSEMENT

DD Form 1375, Request for Payment of Funeral and/or Interment Expenses, should be used by the NOK for submitting a claim for reimbursement of primary, transportation, and secondary expenses when Government services were not used. This form should also be used as a claim for the interment allowance when the Navy has arranged for primary services and transportation.

If Government services were not used when death occurred in CONUS, the claim will be forwarded to the Naval Regional Medical Office for the district in which death occurred. In areas outside CONUS, the claims should be sent to the appropriate area commander or to BUMED. The Regional Medical Officer, area commander, or BUMED will adjudicate and pay for primary expenses and transportation costs to the common carrier terminal at final destination. A claim should also be submitted to the Regional Medical Office or commander (Staff Medical Officer) of the area in which interment was made or to BUMED for payment of supplemental transportation and interment allowance.

When the Navy has arranged for primary services and transportation, claims for payment or reimbursement of supplemental transportation and interment costs should be submitted by the funeral director or PNOK to the Naval Regional Medical Office for the district in which interment was made, to the activity in an overseas area of burial which has authority for local payment, or to BUMED.

Activities incurring expenses in connection with disposition of remains of Navy and Marine Corps personnel need not report such expenses to BUMED. Activities obtaining services and supplies from commercial sources in arranging for disposition of the remains of other services will send a report (Report of Disposition and Expenditures—Remains of Dead, Report Symbol Med-5360-3) to the service concerned.

INDEX

A

Accident prevention program, 5-29
Accuracy, prescription, 4-4
Acne, 2-24, 2-25
Addison's disease, 2-33
Admissions, 11-15, 11-16
Advancement, 1-1 to 1-6
    requirements for, 1-2, 1-3
    scope of this training course, 1-3, 1-4
    sources of information, 1-4 to 1-6
    the hospital corpsman rating, 1-3
    your horizon broadens, 1-1, 1-2
Advancement in rating, 11-8, 11-17
    for patients, 11-17
Advancement manual, 9-3
Air conditioning, 5-5
Allergic rhinitis, 2-21
Allotments, 12-5
Alveolar process, 2-44
Amenorrhea, 2-40
Anemia, 2-17
Anesthesia, local, 2-45, 2-46
Angina pectoris, 2-15
Annual appropriations, 12-3
Appendicitis, 2-11
Appropriations, 12-3 to 12-5
    categories, 12-5
    status of, 12-4
    symbols, 12-4, 12-5
    types of, 12-3, 12-4
Arthritis, 2-18
Asbestos control, 5-28
Aspiration pneumonia, 2-6
Asthma, 2-7
Atherosclerosis (hardening of the arteries), 2-15
Atopic dermatitis, 2-24
Aural furunculosis, 2-19
Authority, delegation of, 8-1
Autopsy reports, 13-3
Awards manual, 9-3

B

Bacilli, 7-2, 7-3
Bacteriology, 7-1 to 7-3
    bacilli, 7-2, 7-3
    cocci, 7-2
    common bacteria, 7-2
Bartholin's gland, cysts and abscesses of, 2-39
Bibliography for Advancement Study, 1-4, 1-5
Bland diets, 3-21, 3-22
Blood grouping, 7-7 to 7-9
BPAs, 12-30 to 12-32
Breast conditions, common, 2-41
Bronchitis, 2-6, 2-7
Budgets, operating, 12-5, 12-6
Bulkhead-to-bulkhead inventory, 12-40
Bureau of Medicine and Surgery, the, 8-2 to 8-7
    administrative services, 8-7
    clinical services, 8-5 to 8-7
    medical treatment facilities, 8-7
    Naval Regional Medical Centers and Hospitals, 8-5
    Navy Medical Department, 8-2 to 8-5
    Navy Regional Health Care System, 8-5

272

Bureau of Naval Personnel Manual, 9-1, 9-2
Bursitis, 2-17, 2-18

C

Calluses and corns, 2-25
Caries, dental, 2-46 to 2-48
Carbohydrates, 3-2
Casualty Assistance Calls Program, 13-1
Catalog, Federal Supply, 12-7 to 12-9
Cellutitis, 2-27
Cementum, 2-43, 2-44
Central nervous system (CNS), traumatic conditions of the, 2-31, 2-32
Cerebrovascular accident, 2-31
Chain of command, 8-1
Cholecystitis, 2-12
Circulatory system, diseases of the, 2-14 to 2-17
Civil certificates of death, 13-7 to 13-10
Civilian Personnel Branch, 11-18
Classified information, 10-5 to 10-8
Clinical laboratory, 7-1 to 7-9
  bacteriology, 7-1 to 7-3
  blood grouping, 7-7 to 7-9
  ethics, 7-9
  fungus (pl. fungi), 7-6
  introduction, 7-1
  responsibilities, 7-9
  serology, 7-5, 7-6
  smears, 7-3, 7-4
Clinical services, 8-5 to 8-7
Cocci, 7-2
Cognizance symbols, 12-6
Colitis, nonspecific ulcerative, 2-11
Collections and payments, decedent affairs, 13-10, 13-11
Communicable disease control, 5-22 to 5-27
  immunizations, 5-26
  quarantine regulations, 5-26, 5-27
  sexually transmitted disease, 5-22 to 5-25
  tuberculosis control program, 5-25, 5-26
Concurrent Return Program, 13-1
Condolence letter, 13-3
Congestive heart failure, 2-15, 2-16
Conjunctivitis, 2-22, 2-23
Constipation, 2-9
Continuing appropriations, 12-3, 12-4
Controlled medicinals and narcotics, inventory, 12-56
Contusions (black eye), 2-22
Corneal abrasions, 2-22
Correspondence, 10-1 to 10-5
Correspondence manual, 9-3, 9-4
Costochondritis (Tietze's syndrome), 2-17
Count documents, 12-42 to 12-44
Cremation, 13-5
Current Death Program, the, 13-1
Custody and maintenance of patient records, 11-16, 11-17
Cystitis, 2-13

D

Diabetes, 2-32, 2-33
  insipidis, 2-32, 2-33
  mellitus, 2-32
Decedent affairs, 13-1 to 13-11
  at sea disposition, 13-5
  Casualty Assistance Calls Program, 13-1
  Civil certificates of death, 13-7 to 13-10
  Concurrent Return Program, 13-1
  cremation, 13-5
  disposition of personal effects, 13-7
  eligibility for decedent affairs, 13-2
  escorts, 13-6, 13-7
  Graves Registration Program, 13-2
  notification of death, 13-2, 13-3
  payments and collections, 13-10, 13-11
  preparing and processing remains, 13-4, 13-5
  procuring mortuary services, 13-4
  search, recovery, and identification, 13-3, 13-4
  the Current Death Program, 13-1
  transportation of remains, 13-5, 13-6
Decompression sickness, 2-8
Decontamination, 6-1, 6-2, 6-6, 6-7, 6-8, 6-9
  biological, 6-6
  chemical, 6-1, 6-2
  radiological, 6-8, 6-9
  stations, 6-7, 6-8
Dendritic ulcer, 2-23
Dental care, 2-41 to 2-58
Dentin, 2-43
Department of Defense, 8-1
Department of Defense Information Security Program Regulation, 9-3
Department of the Navy, 8-1 to 8-9

273

Department of the Navy Information Security Program Regulation, 9-3
Dermatological conditions, common, 2-24 to 2-28
Diagnosis, physical, 2-1 to 2-3
Diarrhea, 2-9
Diary, personnel, 11-2
Diet therapy, 3-1 to 3-23
  bland diets, 3-21, 3-22
  diets, 3-4 to 3-20
    modified or therapeutic diets, 3-6 to 3-20
    objectives of diet therapy, 3-4, 3-6
    regular diet, 3-6
  food classification, 3-1 to 3-4
    carbohydrates, 3-2
    fats, 3-2
    minerals, 3-2, 3-3
    proteins, 3-1
    vitamins, 3-2, 3-4
    water, 3-4
  guide to good eating, 3-4, 3-5
Directives Issuance System, Navy, 9-5 to 9-7
Directives, types of, 9-6, 9-7
Discharges, 11-9, 11-10
  bad conduct, 11-10
  dishonorable, 11-10
  general, 11-9
  honorable, 11-9
  under other than honorable conditions, 11-9
Dishwashing, 5-15 to 5-17
Disk, herniated, 2-31, 2-32
Disposition of patients, 11-17, 11-18
Dysmenorrhea, 2-39, 2-40

E

Ear, conditions of the, 2-19, 2-20
Edema, pulmonary, 2-8, 2-9
Embolism, pulmonary, 2-8
Enamel, 2-43
Endocrine disorders, 2-32, 2-33
Enlisted Distribution and Verification Report, 11-3
Enlisted Service Record, 11-5, 11-6
Enlisted Transfer Manual, 9-3
Enteritis, regional, 2-11
Envelopes and mailing 10-8, 10-9
Epididymitis, 2-13
Epilepsy, 2-30, 2-31
Epistaxis, 2-20, 2-21
Escorts, decedent affairs, 13-6, 13-7
Ethics in the laboratory, 7-9
Examination, physical, 2-3 to 2-5, 2-34 to 2-37, 2-44, 2-45
  female genitalia, 2-34 to 2-37
  oral, 2-44, 2-45
Extension of enlistment, 11-8

F

Fats, 3-2
Federal Catalog System (FCS), 12-6 to 12-9
Female specific conditions, 2-33 to 2-41
Fibrinous pleurisy, 2-7
Files, prescription, 4-5
Filling the prescription, 4-3 to 4-6
  check for accuracy, 4-4
  prescription files, 4-5
  prescription labeling, 4-4
  verification, 4-3
  where and why prescriptions go wrong, 4-5, 4-6
Films, training, 1-6
Finance and supply, Navy medical, 12-1 to 12-59
Fixed medical treatment facilities, 8-7
Fleet Marine Force (FMF), medical department support to, 8-8, 8-9
Floaters, 2-23
Folliculitis, 2-27
Food and water, protection of, 6-5, 6-6
Food classification, 3-1 to 3-4
Food service sanitation, 5-5 to 5-17
  food service personnel, 5-13
  procurement, inspection, and storage of foodstuffs, 5-6 to 5-13
  responsibilities, 5-5, 5-6
  sanitary precautions for preparing and serving food, 5-13 to 5-15
  standards and sanitation of food service equipment and utensils, 5-15 to 5-17
  standards and sanitation of food service facilities, 5-17
Foodstuffs, procurement, inspection, and storage of, 5-6 to 5-13
Force/Activity Designator (F/AD), 12-11
Fractured teeth, 2-55, 2-56

Fungus, 7-6
Furuncles and carbuncles, 2-26, 2-27

G

Gastritis, acute simple, 2-10, 2-11
Gastrointestinal (GI) tract, diseases of the, 2-9 to 2-12
Genitourinary (GU) tract, diseases of the, 2-13, 2-14
Gingivae, 2-44
Gingivitis, marginal, 2-49
Glaucoma, acute, 2-21, 2-22
Gonococcal arthritis, 2-18, 2-19
Gouty arthritis, 2-18
Gram's stain, 7-3, 7-4
  Hucker's modification of, 7-3, 7-4
  principle of, 7-4
  procedure for, 7-4
Graves Registration Program, 13-2
Guide to good eating, 3-4, 3-5

H

Halogenated hydrocarbons, 5-28, 5-29
Headache, 2-29, 2-30
Head injuries, 2-31
Health Care System, Navy Regional, 8-5
Health record, the, 11-6
Hearing conservation program, 5-29
Heating, ventilation, and air conditioning, 5-2 to 5-5
  additional considerations aboard ship, 5-5
  air conditioning, 5-5
  definitions, 5-3, 5-4
  general, 5-2
  heating, 5-4
  stress and strain, 5-2, 5-3
  ventilation, 5-4, 5-5
Hemorrhage, post exodontic, 2-54
Hemorrhoids, 2-12
Hepatitis, 2-12
Herniated disk, 2-31, 2-32
Herpes, 2-25, 2-26, 2-52 to 2-54
  labial, 2-52 to 2-54
  simplex, 2-25
  zoster, 2-26
Hiatal hernia, 2-10
High calorie diet, 3-6, 3-7 to 3-9
High protein diet, 3-7
High protein, low carbohydrate diet, 3-23
High residue diet, 3-14, 3-15
Hodgkin's disease, 2-16, 2-17
Hordeolum, 2-23
Hospitals and Medical Centers, Naval Regional, 8-5
Hucker's modification of Gram's stain, 7-3, 7-4
Hygiene, sanitation, and safety, personal, 5-21
Hypertension, 2-16
Hyperthyroidism, 2-33
Hypothyroidism, 2-33

I

Immediate reenlistment, 11-11, 11-12
Immunizations, 5-26
Impetigo, 2-26
Imprest fund, 12-11
Information, sources of, 1-4 to 1-6
  NMPC publications, 1-4 to 1-6
  training films, 1-6
Inguinal hernia, 2-11
Injury report, 11-19
Inspection, foodstuffs, 5-6 to 5-10
Inventory management, 12-37 to 12-57
  controlled medicinals and narcotics, 12-56
  definitions, 12-37 to 12-39
  physical inventory, 12-40 to 12-56
  plant property, 12-57
  property surveys, 12-56, 12-57
  required forms, 12-39
  SIM, 12-40
Investment equipment, planning and acquiring medical and dental, 12-57 to 12-59
Iritis, 2-23
Issue Priority Designator (IPD), 12-12

J

Joint Travel Regulations, 9-4

L

Labeling, prescription, 4-4
Labial herpes, recurrent, and stomatitis, 2-52 to 2-54
Labyrinthine disease, 2-20
Laryngitis, acute, 2-21
Leave and liberty, 11-7
Letter requests and message requisitions, 12-21 to 12-28

Leukemia, 2-17
Liquid diet, 3-6
Local item control numbers, 12-6, 12-7
Low calorie diet, 3-9 to 3-12
Low carbohydrate, high protien diet, 3-23
Low protein diet, 3-12, 3-13
Low residue diet, 3-16 to 3-18
Low sodium diet, 3-16, 3-18 to 3-20
Lymphadenitis and lymphangitis, 2-17

M

Mailing and envelopes, 10-8, 10-9
Manpower and Personnel Management Information System, 11-1 to 11-4
  Enlisted Distribution and Verification Report, 11-3
  Officer Distribution Control Report, 11-3, 11-4
  the personnel diary, 11-2
Manual for Courts-Martial, 9-2
Manual of the Judge Advocate General, 9-2
Manual of the Medical Department, 9-5
Medical aspects of chemical, biological, and radiological defense, 6-1 to 6-10
  biological defense, 6-4 to 6-6
    decontamination, 6-6
    group protection, 6-5
    individual protection, 6-4, 6-5
    protection of food and water, 6-5, 6-6
  chemical defense, 6-1 to 6-4
    decontamination, 6-1, 6-2
    self-protection and treatment, 6-1
    supplies, 6-2 to 6-4
  radiological defense, 6-6 to 6-10
    contaminated material and supplies, 6-9, 6-10
    decontamination, 6-8, 6-9
    decontamination stations, 6-7, 6-8
    self-protection, 6-6, 6-7
Medical Centers and Hospitals, Naval Regional, 8-5
Medical Information Services Branch, 11-18
Medicine and Surgery, Bureau of, the, 8-2 to 8-7
Message requisitions and letter requests, 12-21 to 12-28
Minerals, 3-2, 3-3
Monospot Slide Test (FSN 6505-01-005-4375) for infectious mononucleosis, 7-5, 7-6
Mortuary services, procuring, 13-4
MSD systems, 5-20
Multiple-year appropriations, 12-4
Musculoskeletal system, problems of the, 2-17 to 2-19
Myocardial infarction (MI), 2-15

N

Narcotics and controlled medicinals, inventory, 12-56
National Stock Numbers (NSN), 12-6
Nausea and vomiting, 2-9
Naval manuals, directives and reports, 9-1 to 9-8
  advancement manual, 9-3
  awards manual, 9-3
  Bureau of Naval Personnel Manual, 9-1, 9-2
  correspondence manual, 9-3, 9-4
  Department of Defense Information Security Program Regulation, 9-3
  Department of Defense Military Pay and Allowance Entitlements Manual, 9-2
  Department of the Navy Information Security Program Regulation, 9-3
  Department of the Navy Standard Subject Identification Codes, 9-4
  Enlisted Transfer Manual, 9-3
  Joint Travel Regulations, 9-4
  Manual for Courts-Martial, 9-2
  Manual of the Judge Advocate General, 9-2
  Manual of the Medical Department, 9-5
  Naval reporting requirements, 9-7, 9-8
  Navy and Marine Corps Military Pay Procedures, 9-3
  Navy Directives Issuance System, 9-5 to 9-7
  Navy Officers Classifications Manual, 9-4, 9-5
  Navy Pay and Personnel Procedures Manual, 9-3
  Navy Register, 9-4
  Navy regulations, 9-1
  Navy travel instructions, 9-4
  records retirement, 9-8
  Standard Navy Distribution List, 9-5
  Standard Organization and regulations of the U.S. Navy, 9-1
  Telecommunications User Manual, 9-4
  U.S. Navy Plain Language Address Directory, 9-4
  uniform regulations, 9-2

- Navy and Marine Corps Military Pay Procedures, 9-3
- NAVSUP publications, 12-1 to 12-3
- Navy correspondence and classified information, 10-1 to 10-9
  - classified information, 10-5 to 10-8
    - categories, 10-6, 10-7
    - definitions, 10-5, 10-6,
    - Standard Subject Identification Codes, 10-7, 10-8
  - correspondence, 10-1 to 10-5
    - determining the components of a communication, 10-2 to 10-4
    - routing of, 10-4, 10-5
    - types of correspondence and use of each, 10-1, 10-2
  - envelopes and mailing, 10-8, 10-9
    - special mailing instructions, 10-9
    - ZIP code, 10-9
- Navy Item Control Numbers (NICN), 12-6
- Navy medical finance and supply, 12-1 to 12-59
  - allotments, 12-5
  - appropriations, 12-3 to 12-5
  - Federal Catalog System (FCS), 12-6 to 12-9
  - inventory management, 12-37 to 12-57
  - NAVSUP publications, 12-1 to 12-3
  - operating budgets, 12-5, 12-6
  - planning and acquiring medical and dental investment equipment, 12-57 to 12-59
  - procurement, 12-9 to 12-32
  - requisition file maintenance, 12-35
  - stock points and sources of supply, 12-32 to 12-35
  - stowage, 12-36, 12-37
- Navy Officers Classifications Manual, 9-4, 9-5
- Navy Register, 9-4
- Navy training courses, 1-5
- Necrotizing ulcerative gingivitis (NUG), 2-50
- Nervous system, disorders of the, 2-28 to 2-31
- NMPC publications, 1-4 to 1-6
  - Bibliography for Advancement Study, 1-4, 1-5
  - Navy training courses, 1-5
  - occupational standards, 1-4
  - other NMPC publications, 1-5, 1-6
  - Personnel Advancement Requirement (PAR), 1-4
- Nonfixed medical treatment facilities, 8-7
- Nose, conditions of the, 2-20, 2-21
- Notification of death, 13-2, 13-3

O

- Occupational standards, 1-4
- Ocular system, disorders of the, 2-21 to 2-23
- Officer Distribution Control Report, 11-3, 11-4
- Officer Service Record, 11-4, 11-5
- Operating budgets, 12-5, 12-6
- Oral examination, 2-44, 2-45
- Organization, Navy, 8-1 to 8-9
  - chain of command, 8-1
  - delegation of authority, 8-1
  - Department of Defense, 8-1
  - Department of the Navy, 8-1 to 8-9
    - Bureau of Medicine and Surgery, 8-2 to 8-7
    - Medical department support to the Fleet Marine Force (FMF), 8-8, 8-9
- Osteitis, postexodontic, 2-54
- Otitis, acute external (swimmer's ear), 2-19
- Otitis media, acute, 2-20
- Otomycosis, 2-19
- OTTO Fuel II, 5-29
- Outpatient, 11-16
- Overseas sources of supply, 12-35

P

- Pancreatitis, 2-12
- Patient Affairs Division, 11-15
- Payments and collections, decedent affairs, 13-10, 13-11
  - interment expenses, 13-10
  - primary expenses (mortuary services), 13-10
  - procedures for reimbursement, 13-11
  - transportation expenses, 13-10
- Pediculosis corporis, 2-28
- Pediculosis pubis, 2-28
- Peptic ulcer, 2-10
- Periapical abscess, 2-48, 2-49
- Pericoronitis, 2-51, 2-52
- Perdiculosis capitis, 2-28
- Periodontal abcess, 2-51
- Periodontitis, 2-50, 2-51
- Periodontium, tissues of the, 2-44
- Peritonsillar abcess, 2-21
- Personnel Advancement Requirement (PAR), 1-4
- Personnel division, 11-15

- Personnel records and accounting, 11-1 to 11-19
  - advancement in rating, 11-8
  - conclusion, 11-19
  - day-to-day personnel reporting, 11-1
  - extension of enlistment, 11-8
  - leave and liberty, 11-7
  - personnel administration at Naval Hospitals, U.S. Naval Hospitals, Naval Regional Medical Centers and U.S. Naval Regional Medical Centers, 11-15 to 11-19
  - promotion of officers, 11-8
  - separation of enlisted personnel, 11-8 to 11-12
  - the health record, 11-6
  - the Manpower and Personnel Management Information System, 11-1 to 11-4
  - the service record, 11-4 to 11-6
  - transfer and receipt of personnel, 11-12 to 11-15
  - use and maintenance of reference material, 11-1
- Pharynx, conditions of the, 2-21
- Physical diagnosis and treatment, 2-1 to 2-58
  - acute thoracic emergencies, 2-5
  - common dermatological conditions, 2-24 to 2-28
  - dental care, 2-41 to 2-58
  - diseases of the circulatory system, 2-14 to 2-17
  - diseases of the gastrointestinal (GI) tract, 2-9 to 2-12
  - diseases of the genitourinary (GU) tract, 2-13, 2-14
  - diseases of the respiratory tract, 2-5 to 2-9
  - disorders of the nervous system, 2-28 to 2-31
  - disorders of the ear, nose, and throat, 2-19 to 2-21
  - disorders of the ocular system, 2-21 to 2-23
  - endocrine disorders, 2-32, 2-33
  - female specific conditions, 2-33 to 2-41
  - physical examination, 2-3 to 2-5
  - problems of the musculoskeletal system, 2-17 to 2-19
  - psychiatric disorders, 2-32
  - traumatic conditions of the central nervous system (CNS), 2-31, 2-32
- Plant property, 12-57
- Pleurisy, fibrinous, 2-7
- Pneumonia, 2-6
- Pneumothorax, 2-7, 2-8
  - spontaneous, 2-7, 2-8
  - traumatic, 2-8
- Potassuim hydroxide (KOH) preparation for identification of fungi, 7-6
- Pregnancy, 2-40, 2-41
- Premenstrual tension syndrome, 2-39
- Prescription writing and filling, 4-1 to 4-6
  - filling the prescription, 4-3 to 4-6
  - the prescription, 4-1
  - who may write a prescription, 4-1 to 4-3
- Preventive medicine, 5-1 to 5-29
  - communicable disease control, 5-22 to 5-27
  - food service sanitation, 5-5 to 5-17
  - heating, ventilation, and air conditioning, 5-2 to 5-5
  - safety and industrial health, 5-27 to 5-29
  - sanitation of living spaces, 5-1, 5-2
  - wastewater treatment and disposal, 5-17 to 5-22
- Procurement, 12-9 to 12-32
  - BPAs, 12-30 to 12-32
  - DD 1149, 12-21
  - DD 1348, 12-12 to 12-20
  - letter requests and message requisitions, 12-21 to 12-28
  - non-NSN requisition document, DD 1348-6, 12-20, 12-21
  - purchase, 12-28 to 12-30
  - requisitioning, 12-9 to 12-11
  - Uniform Materiel Movement and Issue Priority System (UMMIPS), 12-11, 12-12
- Promotion of officers, 11-8
- Property surveys, 12-56, 12-57
- Prostatitis, 2-13
- Proteins, 3-1
- Psoriasis, 2-24
- Psychiatric disorders, 2-32
- Pulmonary abscess, 2-7
- Pulp, 2-44
- Pulpitis, acute, 2-48
- Purchase, 12-28 to 12-30
- Pyelonephritis, 2-13
- Pyrosis, 2-9

Q

- Quarantine regulations, 5-26, 5-27

R

- Random sampling inventory, 12-42
- Rapid Plasma Reagin (RPR) card test for syphilis, 7-5
- Rating, the hospital corpsman, 1-3
- Reading and reporting smears, 7-4
- Receipt of personnel, 11-14
- Records and forms, dental, 2-56 to 2-58
- Records retirement, 9-8
- Reenlistment, immediate, 11-11, 11-12
- Reference material, use and maintenance of, 11-1
- Renal calculi, 2-13, 2-14
- Reporting requirements, Naval, 9-7, 9-8
- Requirements for advancement, 1-2, 1-3
- Requisition file maintenance, 12-35
- Respiratory tract, diseases of the, 2-5 to 2-9
- Retinal detachment, 2-23
- Rheumatic fever, 2-14, 2-15
- Rh factors, 7-7
- Rhinitis, allergic, 2-21
- Routing of correspondence, 10-4, 10-5

S

- Safety and industrial health, 5-27 to 5-29
  - accident prevention program, 5-29
  - asbestos control, 5-28
  - halogenated hydrocarbons, 5-28, 5-29
  - hearing conservation program, 5-29
  - metals and other materials, 5-27, 5-28
  - OTTO Fuel II 5-29
- Salpingitis, 2-39
- Sanitation of living spaces, 5-1, 5-2
- Scabies, 2-28
- Scope of this training course, 1-3, 1-4
- Search, recovery, and identification, 13-3, 13-4
- Seborrheic dermatitis, 2-25
- Separation of enlisted personnel, 11-8 to 11-12
  - bad conduct discharge, 11-10
  - discharge under other than honorable conditions, 11-9
  - dishonorable discharge, 11-10
  - general discharge, 11-9
  - honorable discharge, 11-9
  - immediate reenlistments, 11-11, 11-12
  - procedures, 11-10, 11-11
- Septicemia, 2-16
- Serology, 7-5, 7-6
  - Monospot Slide Test (FSN 6505-01-005-4375) for infectious mononucleosis, 7-5, 7-6
  - Rapid Plasma Reagin (RPR) card test for syphilis, 7-5
- Service record, the, 11-4 to 11-6
  - Enlisted, 11-5, 11-6
  - Officer, 11-4, 11-5
  - security and custody, 11-6
- Sewage transfer, 5-20, 5-21
- Sexually transmitted disease, control of, 5-22 to 5-25
- SIM, 12-40
- Smears, 7-3, 7-4
  - Gram's stain, 7-3, 7-4
  - preparation of, 7-3
  - reading and reporting, 7-4
- Special materiel inventory, 12-41
- Specific commodity inventory, 12-40
- Spot inventory, 12-41
- Standard Navy Distribution List, 9-5
- Standard Organization and Regulations of the U.S. Navy, 9-1
- Standard Subject Identification Codes, 9-4, 10-7, 10-8
- Stock points and sources of supply, 12-32 to 12-35
- Stock record cards, 12-44 to 12-56
- Stomatitis and recurrent labial herpes, 2-52 to 2-54
- Storage, foodstuffs, 5-10 to 5-13
- Stowage, 12-36, 12-37
  - security, 12-37
  - storerooms, 12-36, 12-37
- Supply and finance, Navy medical, 12-1 to 12-59
- Surgery and Medicine, Bureau of, the, 8-2 to 8-7
- Subarachnoid hemorrhage, 2-31
- Syncope and vertigo, 2-29

T

- Teeth, tissues of the, 2-43, 2-44
- Telecommunications User Manual, 9-4
- Tendinitis/tenosynovitis, 2-18
- Testicular torsion, 2-14

Thoracic emergencies, acute, 2-5
Thrombophlebitis, 2-16
Tinea capitis, 2-27
Tinea corporis, 2-27
Tinea cruris, 2-27
Tinea pedis, 2-27, 2-28
Tinea versicolor, 2-28
Tinnitus, 2-20
Tonsilitis, acute, 2-21
Training films, 1-6
Transfer and receipt of personnel, 11-12 to 11-15
    duty assignment within the activity, 11-15
    enlisted personnel, 11-13, 11-14
    officer personnel, 11-13
    receipt of personnel, 11-14
    service record entries, 11-14, 11-15
    types of orders, 11-12, 11-13
Transportation of remains, decedent affairs, 13-5, 13-6
    cremated remains (cremains), 13-6
    during year-end and holidays, 13-6
    special requirements, 13-6
    to or from CONUS, 13-6
    within the United States, 13-5
Travel Regulations, Joint, 9-4
Tuberculosis control program, 5-25, 5-26
Tympanic membrane, perforated, 2-19

U

Uniform Materiel Movement and Issue Priority System (UMMIPS), 12-11, 12-12
Uniform regulations, 9-2
Upper GI hemorrhage, 2-10
Upper respiratory infection (URI), 2-5
Uremia, 2-14
Urgency of Need Designator (UND), 12-11, 12-12
Urticaria (hives), 2-25
U.S. Navy Plain Language Address Directory, 9-4

V

Vaginitis, 2-37, 2-38
Varicose veins, 2-16
Velocity inventory, 12-41, 12-42
Ventilation, 5-4, 5-5
Verification, prescription, 4-3
Verrucae, 2-26
Vertigo and syncope, 2-29
Vitamins, 3-2, 3-4
Vomiting and nausea, 2-9
Vulvitis, 2-38

W

Wastewater treatment and disposal, 5-17 to 5-22
    afloat, 5-19, 5-20
    general, 5-17 to 5-19
    medical department responsibilities, 5-21, 5-22
    personal hygiene, sanitation, and safety, 5-21
    sewage transfer, 5-20, 5-21
    waste disposal in the field, 5-22
Water, 3-4
Water and food, protection of, 6-5, 6-6
Writing and filling, prescription, 4-1 to 4-6

Z

ZIP code, 10-9

HOSPITAL CORPSMAN 1&C

NAVEDTRA 10670-B

Prepared by the Naval Education and Training Program Development
Center, Pensacola, Florida

Your NRCC contains a set of assignments and perforated answer sheets. The Rate Training Manual, Hospital Corpsman 1&C NAVEDTRA 10670-B, is your textbook for the NRCC. If an errata sheet comes with the NRCC, make all indicated changes or corrections. Do not change or correct the textbook or assignments in any other way.

HOW TO COMPLETE THIS COURSE SUCCESSFULLY

Study the textbook pages given at the beginning of each assignment before trying to answer the items. Pay attention to tables and illustrations as they contain a lot of information. Making your own drawings can help you understand the subject matter. Also, read the learning objectives that precede the sets of items. The learning objectives and items are based on the subject matter or study material in the textbook. The objectives tell you what you should be able to do by studying assigned textual material and answering the items.

At this point you should be ready to answer the items in the assignment. Read each item carefully. Select the BEST ANSWER for each item, consulting your textbook when necessary. Be sure to select the BEST ANSWER from the subject matter in the textbook. You may discuss difficult points in the course with others. However, the answer you select must be your own. Remove a perforated answer sheet from the back of this text, write in the proper assignment number, and enter your answer for each item.

Your NRCC will be administered by your command or, in the case of small commands, by the Naval Education and Training Program Development Center. No matter who administers your course you can complete it successfully by earning a 3.2 for each assignment. The unit breakdown of the course, if any, is shown later under Naval Reserve Retirement Credit.

WHEN YOUR COURSE IS ADMINISTERED BY LOCAL COMMAND

As soon as you have finished an assignment, submit the completed answer sheet to the officer designated to grade it. The graded answer sheet will not be returned to you.

If you are completing this NRCC to become eligible to take the fleetwide advancement examination, follow a schedule that will enable you to complete all assignments in time. Your schedule should call for the completion of at least one assignment per month.

Although you complete the course successfully, the Naval Education and Training Program Development Center will not issue you a letter of satisfactory completion. Your command will make an entry in your service record, giving you credit for your work.

WHEN YOUR COURSE IS ADMINISTERED BY THE NAVAL EDUCATION AND TRAINING PROGRAM DEVELOPMENT CENTER

After finishing an assignment, go on to the next. Retain each completed answer sheet until you finish all the assignments in a unit (or in the course if it is not divided into units). Using the envelopes provided, mail your completed answer sheets to the Naval Education and Training Program Development Center where they will be graded and the score recorded. Make sure all blanks at the top of each answer sheet are filled in. Unless you furnish all the information required, it will be impossible to give you credit for your work. The graded answer sheets will not be returned.

The Naval Education and Training Program Development Center will issue a letter of satisfactory completion to certify successful completion of the course (or a creditable unit of the course). To receive a course-completion letter, follow the directions given on the course-completion form in the back of this NRCC.

You may keep the textbook and assignments for this course. Return them only in the event you disenroll from the course or otherwise fail to complete the course. Directions for returning the textbook and assignments are given on the book-return form in the back of this NRCC.

PREPARING FOR YOUR ADVANCEMENT EXAMINATION

Your examination for advancement is based on the Occupational Standards for your rating as found in the MANUAL OF NAVY ENLISTED MANPOWER AND PERSONNEL CLASSIFICATIONS AND OCCUPATIONAL STANDARDS (NAVPERS 18068). These Occupational Standards define the minimum tasks required of your rating. The sources of questions in your advancement examination are listed in the BIBLIOGRAPHY FOR ADVANCEMENT STUDY (NAVEDTRA 10052). For your convenience, the Occupational Standards and the sources of questions for your rating are combined in a single pamphlet for the series of examinations for each year. These OCCUPATIONAL STANDARDS AND BIBLIOGRAPHY SHEETS (called Bib Sheets), are available from your ESO. Since your textbook and NRCC are among the sources listed in the bibliography, be sure to study both as you take the course. The qualifications for your rating may have changed since your course and textbook were printed, so refer to the latest edition of the Bib Sheets.

NAVAL RESERVE RETIREMENT CREDIT

This course is evaluated at 4 Naval Reserve retirement points which will be credited upon satisfactory completion of the course. These points are creditable to personnel eligible to receive them under current directives governing the retirement of Naval Reserve personnel.

COURSE OBJECTIVE

Upon completion of this nonresident career course, the student will satisfy a major requirement for advancement to HM1 and HMC by scoring a minimum of 3.2 on each assignment.

While working on this correspondence course, you may refer freely to the text. You may seek advice and instruction from others on problems arising in the course, but the solutions submitted must be the result of your own work and decisions. You are prohibited from referring to or copying the solutions of others, or giving completed solutions to anyone else taking the same course.

Naval courses may include a variety of questions -- multiple-choice, true-false, matching, etc. The questions are not grouped by type; regardless of type, they are presented in the same general sequence as the textbook material upon which they are based. This presentation is designed to preserve continuity of thought, permitting step-by-step development of ideas. Some courses use many types of questions, others only a few. The student can readily identify the type of each question (and the action required) through inspection of the samples given below.

MULTIPLE-CHOICE QUESTIONS

Each question contains several alternatives, one of which provides the best answer to the question. Select the best alternative, and blacken the appropriate box on the answer sheet.

SAMPLE

s-1. The first person to be appointed Secretary of Defense under the National Security Act of 1947 was
1. George Marshall
2. James Forrestal
3. Chester Nimitz
4. William Halsey

Indicate in this way on the answer sheet:

	1 T	2 F	3	4	
s-1	☐	■	☐	☐	___

TRUE-FALSE QUESTIONS

Mark each statement true or false as indicated below. If any part of the statement is false the statement is to be considered false. Make the decision, and blacken the appropriate box on the answer sheet.

SAMPLE

s-2. Any naval officer is authorized to correspond officially with any systems command of the Department of the Navy without his commanding officer's endorsement.

Indicate in this way on the answer sheet:

	1 T	2 F	3	4	
s-2	☐	■	☐	☐	___

MATCHING QUESTIONS

Each set of questions consists of two columns, each listing words, phrases or sentences. The task is to select the item in column B which is the best match for the item in column A that is being considered. Items in column B may be used once, more than once, or not at all. Specific instructions are given with each set of questions. Select the numbers identifying the answers and blacken the appropriate boxes on the answer sheet.

SAMPLE

In questions s-3 through s-6, match the name of the shipboard officer in column A by selecting from column B the name of the department in which the officer functions.

A	B
s-3. Damage Control Assistant	1. Operations Department
s-4. CIC Officer	2. Engineering Department
s-5. Disbursing Officer	3. Supply Department
s-6. Communications Officer	

Indicate in this way on the answer sheet:

	1 T	2 F	3	4	
s-3	☐	■	☐	☐	___
s-4	■	☐	☐	☐	___
s-5	☐	☐	■	☐	___
s-6	■	☐	☐	☐	___

Assignment 1

Advancement; Physical Diagnosis and Treatment; Diet Therapy; Prescription Writing and Filling; Preventive Medicine; and Medical Aspects of Chemical, Biological, and Radiological Defense

Textbook Assignment: Pages 1-1 through 6-1

LEARNING OBJECTIVE: Upon completing items 1-1 thru 1-3, the learner will be able to identify (in writing) the requirements for advancement in rate.

1-1. All of the following are requirements for advancement EXCEPT
1. having a certain amount of time in grade
2. having a certain amount of time in service
3. completing required military and occupational training courses
4. completing the Personnel Advancement Requirement (PAR)

1-2. What publication provides a complete list of required and recommended materials to be studied by personnel working for advancement?
1. Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards, NAVPERS 18068
2. Personnel Advancement Requirement, NAVPERS 1414/4
3. Bibliography for Advancement Study, NAVEDTRA 10052
4. List of Training Manuals and Correspondence Courses, NAVEDTRA 10061

1-3. The publication that gives the minimum occupational standards for advancement in rate is the
1. Bibliography for Advancement Study, NAVEDTRA 10052
2. Bureau of Naval Personnel Manual, NAVPERS 15791B
3. Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards, NAVPERS 18068
4. Manual of Advancement, BUPERSINST 1430.16

LEARNING OBJECTIVE: Upon completing item 1-4, the learner will be able to identify (in writing) a hernia located on the anterior surface of the thigh just below the inguinal ligament.

1-4. A hernia located on the anterior surface of the thigh just below the inguinal ligament is called a/an _______ hernia.
1. ventral
2. inguinal
3. hiatal
4. femoral

LEARNING OBJECTIVE: Upon completing items 1-5 thru 1-15, the learner will be able to identify (in writing) diseases and conditions and their causes, symptoms, and treatments.

1-5. Treatment of acute asthma would most likely include all of the following EXCEPT
1. giving epinephrine
2. administering oxygen
3. restricting fluids
4. giving antibiotics for respiratory infections

1-6. The most essential component of early treatment of pulmonary embolism is
1. treating for shock
2. administering oxygen
3. giving meperidine for pain
4. giving an anticoagulant

284

1-7. Treatment of peptic ulcers includes all of the following EXCEPT
1. mental and physical rest
2. frequent feedings of bland foods and milk
3. high dose antacid therapy
4. diet as tolerated by the patient

1-8. The most serious form of arteriosclerosis is
1. thrombophlebitis
2. coronary insufficiency
3. atherosclerosis
4. angina pectoris

1-9. The primary difference between the pain of myocardial infarction and that of angina pectoris is
1. persistence
2. type
3. location
4. severity

1-10. Inflammation of a lymph node is known as
1. lymphangitis
2. thrombophlebitis
3. lymphadenitis
4. cellulitis

1-11. The drug of choice for acute attacks of gouty arthritis is
1. aspirin
2. Indocin
3. Zyloprim
4. erythromycin

1-12. Acute otitis media is usually caused by
1. allergens
2. viruses
3. fungi
4. bacteria

1-13. A condition of the eye characterized by increased intraocular pressure is
1. hyphema
2. conjunctivitis
3. hordeolum
4. acute glaucoma

1-14. A recurrent viral infection characterized by the sudden appearance of small vesicles on the skin or mucous membranes, usually around the mouth, is
1. herpes simplex
2. urticaria
3. herpes zoster
4. verrucae

1-15. A parasitic skin infection characterized by superficial burrows, intense pruritis, and secondary inflammation is
1. tinea versicolor
2. scabies
3. pediculosis capitis
4. pediculosis corporis

LEARNING OBJECTIVE: Upon completing item 1-16, the learner will be able to identify (in writing) the stages of abortion.

1-16. When the membranes are ruptured and portions of tissue are visible at the cervical os, abortion is
1. threatened
2. imminent
3. inevitable
4. incomplete

LEARNING OBJECTIVE: Upon completing items 1-17 thru 1-19, the learner will be able to identify (in writing) three parts of the dental anatomy.

1-17. The chief hard tissue of the tooth is called
1. cementum
2. enamel
3. dentin
4. periodontium

1-18. The substance that forms a protective layer over the root portion of the dentin is
1. cementum
2. enamel
3. alveolar bone
4. periodontium

1-19. Which of the following supplies the dentin with blood?
1. Crown
2. Pulp
3. Gingiva
4. Periodontium

LEARNING OBJECTIVE: Upon completing items 1-20 thru 1-29, the learner will be able to identify (in writing) various dental conditions and their symptoms and treatments.

1-20. The most common cause of dental caries is
1. sugar
2. lack of fluoridation
3. infrequent dental examinations
4. bacterial plaque

1-21. Severe inflammation of the tooth pulp is known as
1. acute pulpitis
2. periapical abscess
3. marginal gingivitis
4. necrotizing ulcerative gingivitis

1-22. The most frequent cause of marginal gingivitis is
1. bacteria
2. caries
3. poor oral hygiene
4. periodontitis

1-23. The most frequent cause of periodontal abscesses is
1. bacteria
2. continued irritation
3. poor oral hygiene
4. caries

1-24. An inflammation of the gingiva around a partially erupted tooth is known as
1. periodontitis
2. periodontal abscess
3. stomatitis
4. pericoronitis

1-25. An inflammation of the oral mucosa is called
1. stomatitis
2. gingivitis
3. periodontitis
4. pericoronitis

1-26. Labial herpes will normally disappear spontaneously within _______ days.
1. 2 to 4
2. 3 to 6
3. 5 to 8
4. 7 to 10

1-27. Excruciating, constant pain 3 days after a tooth extraction usually indicates
1. hemorrhage
2. osteitis
3. stomatitis
4. pericoronitis

1-28. A tooth fracture with slight exposure of the pulp is a type _______ fracture.
1. I
2. II
3. III
4. IV

1-29. A large fracture of a tooth with much pulp exposure is a type _______ fracture.
1. I
2. II
3. III
4. IV

LEARNING OBJECTIVE: Upon completing items 1-30 thru 1-44, the learner will be able to identify (in writing) criteria for effective diet therapy.

1-30. The main structural unit of all living cells is
1. protein
2. fat
3. water
4. carbohydrate

1-31. Foods rich in protein include
1. tomatoes, fruits, peas, and beans
2. spaghetti, rice, and pastries
3. milk, nuts, meat, and fish
4. rice, pastries, and potatoes

1-32. What nutritional substances contain the greatest concentration of calories?
1. Proteins
2. Fats
3. Carbohydrates
4. Minerals

1-33. The most efficient source of energy in the diet is
1. protein
2. fat
3. water
4. carbohydrate

1-34. How many calories does each gram of carbohydrate yield in the process of metabolism?
1. 4
2. 6
3. 8
4. 9

1-35. Minerals in the diet are essential for
1. maintaining bones and teeth
2. oxidizing fats
3. maintaining body temperature
4. supplying body energy

1-36. Substances present in food that act as catalysts in many chemical reactions of the body are known as
1. minerals
2. proteins
3. vitamins
4. carbohydrates

1-37. The percentage of body weight made up of water is
1. 50
2. 60
3. 70
4. 80

1-38. All of the following would be included in a soft diet EXCEPT
1. tender meat
2. eggs
3. crackers
4. raw vegetables

1-39. A clear liquid diet includes all of the following EXCEPT
1. plain gelatin
2. strained soups
3. fruit drinks
4. popsicles

1-40. Patients with renal disease associated with nitrogen retention should be on a _______ diet.
1. low protein
2. low residue
3. high protein
4. high residue

1-41. A _______ diet is indicated for patients with atonic constipation.
1. low protein
2. low residue
3. high protein
4. high residue

1-42. Which of the foods listed below should not be included in a low residue diet?
1. Buttermilk
2. Hot breads
3. Broiled lamb
4. Ripe bananas

1-43. How many grams of sodium are allowed daily on a strict low sodium diet?
1. 0.25 to 1.0
2. 1.0 to 1.5
3. 1.5 to 2.0
4. 2.0 to 2.5

1-44. The diet used in the treatment of hypoglycemia is
1. bland
2. low calorie
3. high calorie
4. low carbohydrate, high protein

LEARNING OBJECTIVE: Upon completing items 1-45 and 1-46, the learner will be able to identify (in writing) the parts of the prescription.

1-45. That part of the prescription that lists the names and quantities of the ingredients to be used is the
1. inscription
2. superscription
3. signa
4. subscription

1-46. That part of the prescription that gives directions to the compounder is the
1. superscription
2. inscription
3. subscription
4. signa

LEARNING OBJECTIVE: Upon completing item 1-47, the learner will be able to identify (in writing) the Medical Service Corps subspecialty authorized to write prescriptions.

1-47. Members of which of the following subspecialties of the Medical Service Corps are authorized to write prescriptions?
1. Pharmacy
2. Physical Therapy
3. Podiatry
4. Occupational Therapy

LEARNING OBJECTIVE: Upon completing item 1-48, the learner will be able to identify (in writing) the correct numbering and filing procedure for schedule II and III drugs.

1-48. How are prescriptions for schedule II and III drugs numbered and filed?
1. Numbered consecutively, preceded by the letter "N," and filed in the general files
2. Numbered consecutively, preceded by the letter "N," and filed separately
3. Numbered in the same manner as the general files but filed separately
4. Numbered the same as and filed in the general files

LEARNING OBJECTIVE: Upon completing item 1-49, the learner will be able to identify (in writing) the length of time prescriptions must be kept on file.

1-49. Prescriptions must be kept on file for at least _______ years.
1. 2
2. 3
3. 4
4. 5

LEARNING OBJECTIVE: Upon completing items 1-50 thru 1-53, the learner will be able to identify (in writing) facts pertaining to food service and food service inspection.

1-50. Who is ultimately responsible for ensuring that food and beverages served at a command are safe and wholesome?
1. Food service officer
2. Medical officer
3. Commanding officer
4. BUMED

1-51. The _______ officer is accountable for foodborne illness resulting from improper food preparation, serving, or storing.
1. commanding
2. supply
3. food service
4. medical

1-52. The medical officer or the Medical Department representative is responsible for routine inspection of all food service facilities at least
1. once weekly
2. twice weekly
3. once monthly
4. twice monthly

1-53. A can with flat ends, one of which may be forced into a convex position when the other is brought down sharply on a flat surface, is called a
1. flipper
2. bulger
3. springer
4. sweller

LEARNING OBJECTIVE: Upon completing items 1-54 thru 1-62, the learner will be able to identify (in writing) criteria for the storage of foodstuffs.

1-54. Fresh eggs should be stored in a dry, ventilated place at a temperature of _______ ° F.
1. 28
2. 32
3. 40
4. 50

1-55. Overaged semiperishable food must be surveyed.
1. True
2. False

1-56. Fresh fruits and vegetables stored in a tight compartment at 40° F or above may produce an unsafe level of
1. methane gas
2. ethane gas
3. carbon dioxide
4. carbon monoxide

1-57. Temperatures must be logged for all bulk cold storage spaces at least
1. every 4 hours
2. every 8 hours
3. twice daily
4. once daily

1-58. Milk and milk products must be delivered at or below _______° F.
1. 55
2. 50
3. 45
4. 40

1-59. Ice cream must be stored at or below
1. 0° F
2. 0° C
3. 10° F
4. 10° C

1-60. Leftover foods must not be held longer than
1. 24 hours
2. 36 hours
3. 3 days
4. 1 week

1-61. Frozen food should be stored at a constant temperature not above _______° F.
1. 0
2. 10
3. 20
4. 32

1-62. Frozen sandwiches intended for use in flight or boat meals must be consumed within _______ hours after removal from the freezer.
1. 2
2. 3
3. 4
4. 5

LEARNING OBJECTIVE: Upon completing items 1-63 thru 1-66, the learner will be able to identify (in writing) facts pertaining to sanitation of food service areas.

1-63. If not sealed to the wall, floor, and adjacent equipment, food service equipment must be installed at least _______ inches from the wall ashore and _______ inches from the bulkhead aboard ship.
1. 3, 6
2. 4, 8
3. 6, 8
4. 8, 6

1-64. A model field dishwashing unit consists of how many GI cans?
1. three
2. four
3. five
4. six

1-65. The temperature in galley spaces aboard ship must be kept below _______° F.
1. 80
2. 75
3. 70
4. 65

1-66. Navy and Marine Corps food service facilities will be inspected by a Medical Department representative at least
1. weekly
2. semimonthly
3. monthly
4. quarterly

LEARNING OBJECTIVE: Upon completing items 1-67 and 1-68, the learner will be able to identify (in writing) facts pertaining to waste disposal.

1-67. Who is ultimately responsible for evaluating wastewater disposal systems ashore and afloat?
1. Commanding officer
2. Medical officer
3. Safety officer
4. Chief, BUMED

1-68. The overboard discharge by DOD ships of untreated sewage is prohibited by Federal law within _______ miles of the shores of the United States and its territories.
1. 2
2. 3
3. 5
4. 12

LEARNING OBJECTIVE: Upon completing items 1-69 and 1-70, the learner will be able to identify (in writing) facts concerning STD workups.

1-69. Diagnoses and followups of sexually transmitted disease should be entered on SF
1. 502
2. 600
3. 601
4. 603

1-70. Civilian contact investigations are usually the responsibility of the
1. USPHS
2. military STD worker
3. local public health department
4. State public health service

LEARNING OBJECTIVE: Upon completing items 1-71 and 1-72, the learner will be able to identify (in writing) criteria used in the Tuberculosis Control Program.

1-71. Following the initial testing, TB contacts will be examined at _______, _______, and _______ month intervals.
1. 1-, 2-, 3-
2. 2-, 4-, 6-
3. 3-, 6-, 9-
4. 3-, 6-, 12-

1-72. The Annual Report of Tuberculin Retesting is submitted by
1. 1 January
2. 1 February
3. 30 June
4. 30 September

LEARNING OBJECTIVE: Upon completing item 1-73, the learner will be able to identify (in writing) the internationally quarantinable diseases.

1-73. The four internationally quarantinable diseases are
1. malaria, smallpox, cholera, and yellow fever
2. typhoid, smallpox, cholera, and yellow fever
3. plague, smallpox, cholera, and yellow fever
4. syphilis, smallpox, cholera, and yellow fever

LEARNING OBJECTIVE: Upon completing item 1-74, the learner will be able to identify (in writing) the length of time for which a Certificate of Deratization is valid.

1-74. A Certificate of Deratization is valid for _______ months from the date of issue.
1. 3
2. 6
3. 9
4. 12

LEARNING OBJECTIVE: Upon completing item 1-75, the learner will be able to identify (in writing) medical considerations of chemical, biological, and radiological warfare.

1-75. Who is responsible for area decontamination of chemical agents aboard ship?
1. Medical Department
2. Supply Department
3. Damage Control
4. All hands

Assignment 2

Medical Aspects of Chemical, Biological, and Radiological Defense (continued); Clinical Laboratory; Naval Organization; Naval Manuals, Directives, and Reports; Navy Correspondence and Classified Information; Personnel Records and Accounting; Navy Medical Finance and Supply; and Decedent Affairs

Textbook Assignment: Pages 6-2 through 13-11

LEARNING OBJECTIVE: Upon completing items 2-1 thru 2-7, the learner will be able to identify (in writing) medical considerations of chemical, biological, and radiological warfare.

2-1. The first priority in the treatment of chemically contaminated casualties is
1. control of massive hemorrhage
2. decontamination
3. treatment of life-threatening shock and wounds
4. removal of contaminated clothing

2-2. Biological agents can be detected by
1. physical senses
2. chemical detectors
3. laboratory examination
4. all of the above

2-3. When biological agents are known to have been placed in your drinking water, you must
1. double the amount of chlorine in the water
2. double the time the water is exposed to the chlorine
3. refrain from drinking the water
4. boil the water before you drink any of it

2-4. After emergency treatment in the contaminated emergency treatment station, the nuclear casualty is taken to the _______ station.
1. clean emergency treatment
2. sorting
3. decontamination
4. category I treatment

2-5. A nuclear casualty brought to a medical facility by a rescue team should first be taken to the _______ station.
1. sorting
2. monitoring
3. decontamination
4. contaminated emergency treatment

2-6. Noncontaminated nuclear casualties not requiring immediate emergency treatment should go from the monitoring station directly to the _______ station.
1. clean emergency treatment
2. sorting
3. category II treatment
4. category V treatment

2-7. The best method to free water of radioactive material to provide emergency drinking water is
1. coagulation
2. sedimentation
3. filtration
4. distillation

LEARNING OBJECTIVE: Upon completing items 2-8 thru 2-12, the learner will be able to identify (in writing) criteria used in the microscopic identification of bacteria.

2-8. Rod-shaped bacteria appearing singly, in chains, or in palisades are known as
1. bacilli
2. cocci
3. spirilla
4. flagella

291

2-9. Spherical bacteria that stain dark blue with Gram's stain are
1. gram-negative bacilli
2. gram-positive cocci
3. gram-positive bacilli
4. gram-negative cocci

2-10. The ingredient in Gram's stain that stains gram-negative organisms a deep pink is
1. crystal violet
2. iodine solution
3. safranine
4. acetone-alcohol solution

2-11. Large numbers of pus cells with intracellular and extracellular gram-negative, bean-shaped cocci in pairs are diagnostic of
1. diphtheria
2. tuberculosis
3. malaria
4. gonorrhea

2-12. After RPR antigen is prepared, it is good for _______ month(s) without refrigeration and _______ months with.
1. 1, 2
2. 1, 3
3. 2, 6
4. 3, 12

LEARNING OBJECTIVE: Upon completing item 2-13, the learner will be able to identify (in writing) the executive authority of the Navy.

2-13. The executive authority of the Navy is the
1. Navy Department
2. operating forces
3. Shore Establishment
4. Department of the Navy

LEARNING OBJECTIVE: Upon completing item 2-14, the learner will be able to identify (in writing) a special assistant to the commanding officer of a naval regional medical center.

2-14. Which of the following is a special assistant to the commanding officer of a naval regional medical center?
1. Military Personnel Officer
2. Director of Nursing
3. Administrative Assistant
4. Chief, Outpatient Administration

LEARNING OBJECTIVE: Upon completing item 2-15, the learner will be able to identify (in writing) the official responsible for the operation of clinical functions at NRMCs.

2-15. Who is responsible for the operation of clinical functions at NRMCs?
1. CO
2. XO
3. DCS
4. DAS

LEARNING OBJECTIVE: Upon completing item 2-16, the learner will be able to identify (in writing) the components of a medical battalion.

2-16. A medical battalion consists of a headquarters and service company, a hospital company, and _______ medical companies.
1. two
2. three
3. four
4. five

LEARNING OBJECTIVE: Upon completing items 2-17 thru 2-21, the learner will be able to identify (in writing) facts pertaining to Navy publications.

2-17. Changes to the Bureau of Naval Personnel Manual are issued
1. monthly
2. quarterly
3. annually
4. as needed

2-18. Which publication is issued to ensure proper addressing and distribution of mail to all activities of the Department of the Navy?
1. U.S. Navy Plain Language Address Directory
2. Correspondence Manual
3. Navy Register
4. Standard Navy Distribution List

2-19. Instructions and notices issued in the Directives Issuance System are similar in that both
1. contain information of a continuing nature
2. contain information of a temporary nature
3. have the same force and effect
4. provide for their own cancellation

2-20. BUMEDINST 6100.4 is the fourth
1. revision of the instruction
2. instruction from BUMED with the same Standard Subject Identification Code
3. paragraph of the instruction
4. major subject covered by the instruction

2-21. What chapter of the Manual of the Medical Department deals exclusively with Medical Department forms and reports?
1. 20
2. 21
3. 22
4. 23

LEARNING OBJECTIVE: Upon completing items 2-22 thru 2-26, the learner will be able to identify (in writing) the uses of various forms of Navy correspondence.

For items 2-22 thru 2-26, select from column B the type of Navy correspondence that corresponds to the use listed in column A. Items in column B may be used more than once.

	A. Use		B. Type
2-22.	Urgent communications not requiring telegraphic transmission	1.	Endorsement
		2.	Naval letter
2-23.	Informal interoffice communication	3.	Speedletter
		4.	Memorandum

A. Use

2-24. Formal communication within the Department of Defense

2-25. Recording comments on the basic letter by an intermediate addressee

2-26. Addressing other agencies

LEARNING OBJECTIVE: Upon completing item 2-27, the learner will be able to identify (in writing) the proper time for correspondence to be dated.

2-27. Correspondence should be dated on the day it is
1. written
2. typed
3. signed
4. mailed

LEARNING OBJECTIVE: Upon completing items 2-28 and 2-29, the learner will be able to identify (in writing) definitions pertaining to classified information.

2-28. The ability and opportunity to obtain knowledge or possession of classified information is known as
1. clearance
2. compromise
3. access
4. disclosure

2-29. A violation of security that results from an unauthorized person obtaining knowledge of classified information is known as
1. compromise
2. access
3. declassification
4. disclosure

LEARNING OBJECTIVE: Upon completing item 2-30, the learner will be able to identify (in writing) the major subject group that pertains to medicine and dentistry.

2-30. Which of the following major subject groups pertains to medicine and dentistry?
1. 4000
2. 5000
3. 6000
4. 7000

LEARNING OBJECTIVE: Upon completing items 2-31 thru 2-41, the learner will be able to identify (in writing) facts pertaining to personnel procedures and organization.

2-31. An original and at least _______ carbon copies of the personnel diary should be prepared.
1. two
2. three
3. four
4. five

2-32. All of the following are regular diary entries EXCEPT
1. gains
2. losses
3. miscellaneous changes in personnel
4. passenger lists

2-33. The EDVR is distributed monthly by
1. NMPC
2. individual commands
3. EPMAC
4. NAVFINCEN

2-34. On what page of the enlisted service record do you find a chronological record of performance evaluations?
1. 4
2. 9
3. 10
4. 11

2-35. Convalescent leave may be granted by the
1. hospital CO
2. medical officer
3. member's CO
4. Patient Affairs Division

2-36. Separation is the term used to encompass all releases from active naval service EXCEPT desertion and
1. discharge
2. transfer to the Fleet Reserve
3. death
4. resignation

2-37. Which of the following types of discharges may be given ONLY by approved sentences of general courts-martial?
1. General
2. Discharge Under Other Than Honorable Conditions
3. Bad Conduct
4. Dishonorable

2-38. On what page of the service record is the separation interview recorded?
1. 4
2. 7
3. 10
4. 13

2-39. Immediate reenlistement of a qualified individual may be accomplished
1. within 24 hours at a recruiting station
2. after 24 hours at the discharging activity
3. within 24 hours at the discharging activity
4. at any of the above times and places

2-40. Active duty personnel not assigned to any permanent duty station are under _______ orders.
1. Permanent Change of Station
2. Temporary Duty
3. Additional Duty
4. Temporary Additional Duty

2-41. All of the following are branches of the personnel division of a naval hospital EXCEPT
1. Registrar
2. Training
3. Special Services
4. Civilian Personnel

LEARNING OBJECTIVE: Upon completing items 2-42 and 2-43, the learner will be able to identify (in writing) publications relating to MILSTRIP/MILSTRAP.

2-42. The publication that issues policy on the MILSTRIP/MILSTRAP system is
1. NAVSUP P-284
2. NAVSUP P-409
3. NAVSUPINST 4235.3
4. NAVSUP P-437

2-43. All afloat MILSTRIP/MILSTRAP operations are incorporated into
1. NAVSUP P-409
2. NAVSUPINST 4235.3
3. NAVSUP P-437
4. NAVSUP P-485

LEARNING OBJECTIVE: Upon completing items 2-44 thru 2-47, the learner will be able to identify (in writing) facts pertaining to appropriations.

2-44. Current operating and maintenance expenses of the Navy are generally covered by _______ appropriations.
1. annual
2. continuing
3. no-year
4. multiple-year

2-45. The first two digits of an appropriation symbol used to identify all appropriations assigned to the Navy are
1. 11
2. 17
3. 22
4. 27

2-46. A multiple-year appropriation is indicated in the appropriation symbol by numbers representing the _______ year of the appropriation.
1. first
2. last
3. first and last
4. present and last

2-47. The appropriations that provide for the pay and allowances of active duty Navy and Marine Corps personnel are
1. O&MN and O&MMC
2. O&MNR and O&MMCR
3. MPN and MPMC
4. RPN and RPMC

LEARNING OBJECTIVE: Upon completing items 2-48 thru 2-59, the learner will be able to identify (in writing) information pertaining to the Federal supply system.

2-48. The AMAL lists the minimum amount of medical materiel to be maintained on board a ship at any time, normally which is a _______-month supply.
1. 3
2. 6
3. 9
4. 12

2-49. Items under the control of an inventory manager and identified by a National Item Identification Number are called
1. materiel
2. standard stock
3. equipment
4. reserve stock

2-50. A 13-digit stock number that identifies an item in the supply distribution system throughout the Federal system is the
1. NSN
2. FSC
3. NIIN
4. NICN

2-51. A local item control number consists of _______ characters.
1. 7
2. 9
3. 11
4. 13

2-52. The Navy Management Data List contains such things as
1. descriptive data
2. unit of issue
3. colloquial names
4. synonyms

2-53. BUMED-controlled items requiring local purchase action should be ordered on
1. NAVSUP 1114
2. NAVSUP 1250-1
3. DD 1149
4. DD 1348

2-54. Requisition standard stocked BUMED-controlled items on
1. NAVSUP 1114
2. NAVSUP 1250-1
3. DD 1149
4. DD 1348

2-55. An imprest fund may not exceed
1. $ 1,000
2. $ 5,000
3. $10,000
4. $25,000

2-56. The Urgency of Need Designator is assigned by the
1. activity requiring the materiel
2. supply depot
3. stock point
4. inventory control point

2-57. The procurement document for items excluded from MILSTRIP is
1. NAVSUP 1114
2. NAVSUP 1250-1
3. DD 1149
4. DD 1348

2-58. Use _______ to transfer items from the ship's store for the ship's use.
1. NAVSUP 1114
2. NAVSUP 1250-1
3. DD 1149
4. DD 1348

2-59. Request emergency supplies from ships other than supply ships on
1. NAVSUP 1114
2. NAVSUP 1250-1
3. DD 1149
4. DD 1348

LEARNING OBJECTIVE: Upon completing item 2-60, the learner will be able to identify (in writing) the minimum frequency for changing combinations on keyless padlocks on storerooms.

2-60. Combinations on keyless padlocks on storerooms should be changed at least every _______ months.
1. 3
2. 6
3. 12
4. 24

LEARNING OBJECTIVE: Upon completing item 2-61, the learner will be able to identify (in writing) the stockage level identified in the item.

2-61. In addition to the operating level, the quantity of materiel required to be on hand to permit continuous operations if normal replenishment is interrupted, or if usage increases, is known as the
1. safety level
2. operating objective
3. stockage objective
4. requisitioning objective

LEARNING OBJECTIVE: Upon completing items 2-62 and 2-63, the learner will be able to identify (in writing) facts pertaining to inventories.

2-62. An unscheduled physical inventory that is taken to verify the existence or nonexistence of a specific stock item is a _______ inventory.
1. random sampling
2. routine
3. spot
4. velocity

2-63. The Controlled Substances Inventory Board will inventory controlled substances at least every
1. month
2. 3 months
3. year
4. time the custodian changes

LEARNING OBJECTIVE: Upon completing item 2-64, the learner will be able to identify (in writing) an eligible member of a formal survey board.

2-64. Which of the following could serve on a formal survey board?
1. The person in whose custody the materiel is charged
2. The person in whose custody the materiel is carried
3. An ensign
4. A GS-10

LEARNING OBJECTIVE: Upon completing item 2-65, the learner will be able to identify (in writing) the correct time interval between plant property inventories.

2-65. All classes of plant property must be inventoried every _______ years.
1. 2
2. 3
3. 5
4. 7

LEARNING OBJECTIVE: Upon completing items 2-66 thru 2-75, the learner will be able to identify (in writing) facts pertaining to the Decedent Affairs Program.

2-66. The Casualty Assistance Calls Program is administered by
1. Patient Affairs officers at NRMCs
2. commanding officers at NRMCs
3. regional medical offices
4. NMPC

2-67. Bona fide dependents are entitled to which of the following decedent benefits?
1. Casketing
2. Transportation
3. Burial
4. All of the above

2-68. Within CONUS, who is responsible for ensuring that the next of kin is notified of a member's death?
1. Patient Affairs officers at NRMCs
2. Commanding officers at NRMCs
3. The member's commanding officer
4. NMPC

2-69. If additional portions of human remains are recovered from the site of a disaster after initial release of the remains, BUMED will be notified by
1. speedletter
2. telephone
3. routine message
4. priority message

2-70. When search, recovery, and identification operations continue for more than 36 hours, progress reports are sent to BUMED every _______ hours.
1. 12
2. 24
3. 36
4. 48

2-71. To minimize cellular deterioration, remains should be refrigerated at
1. 28° - 32° F
2. 32° - 36° F
3. 36° - 40° F
4. 40° - 44° F

2-72. Which of the following is an acceptable time for the arrival of remains at their destination?
1. 22-26 December
2. Thanksgiving
3. 1 January
4. 4 July

2-73. Permission to remove the remains of deceased naval personnel from the scene of death outside the boundaries of a military reservation must be obtained from the
1. DAP
2. regional medical office
3. commanding officer of the activity nearest the scene
4. local civil authorities

2-74. When death occurs outside CONUS, how many signed copies of DD 2064 must accompany the remains to CONUS?
1. two
2. three
3. four
4. five

2-75. Primary expenses in decedent affairs include which of the following?
1. Transportation
2. Preparation
3. Funeral and burial
4. All of the above

COURSE DISENROLLMENT

All study materials must be returned. On disenrolling, fill out only the upper part of this page and attach it to the inside front cover of the textbook for this course. Mail your study materials to the Naval Education and Training Program Development Center.

PRINT CLEARLY

NAVEDTRA NUMBER COURSE TITLE

10670-B Hospital Corpsman 1&C

Name Last First Middle

Rank/Rate Designator Social Security Number

COURSE COMPLETION

Letters of satisfactory completion are issued only to personnel whose courses are administered by the Naval Education and Training Program Development Center. On completing the course, fill out the lower part of this page and enclose it with your last set of answer sheets. Be sure mailing addresses are complete. Mail to the Naval Education and Training Program Development Center.

PRINT CLEARLY

NAVEDTRA NUMBER COURSE TITLE

10670-B Hospital Corpsman 1&C

Name

ZIP CODE

MY SERVICE RECORD IS HELD BY:

Activity

Address ZIP CODE

Signature of enrollee

A FINAL QUESTION: What did you think of this course? Of the text material used with the course? Comments and recommendations received from enrollees have been a major source of course improvement. You and your command are urged to submit your constructive criticisms and your recommendations. This tear-out form letter is provided for your convenience. Typewrite if possible, but legible handwriting is acceptable.

Date ____________________

From: ________________________________
(RANK, RATE, CIVILIAN)

____

________________________________ ZIP CODE __________

To: National Naval Medical Center
HSETC Code 212
Bethesda, Maryland 20014

Subj: RTM/NRCC Hospital Corpsman 1 & C, NAVEDTRA 10670-B

1. The following comments are hereby submitted:

★U.S. GOVERNMENT PRINTING OFFICE: 1981— 740-086:15

(Fold along dotted line and staple or tape)
....

(Fold along dotted line and staple or tape)
....

DEPARTMENT OF THE NAVY

NATIONAL NAVAL MEDICAL CENTER
HSETC CODE 212
BETHESDA, MARYLAND 20014

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

POSTAGE AND FEES PAID
NAVY DEPARTMENT
DoD-316

U.S.MAIL

NATIONAL NAVAL MEDICAL CENTER
HSETC CODE 212
BETHESDA, MARYLAND 20014

Hospital Corpsman 1&C
NAVEDTRA 10670-B

PRINT OR TYPE

NAME ______________________________ ADDRESS ______________________________
Last First Middle
Street/Ship/Unit/Division, etc.
____
City or FPO State Zip

RANK/RATE ________ SOC. SEC. NO. ________________ DESIGNATOR ________ ASSIGNMENT NO. ________

☐ USN ☐ USNR ☐ ACTIVE ☐ INACTIVE OTHER (Specify) ________________ DATE MAILED ________

SCORE

1 2 3 4
T F

1 ☐☐☐☐ -----
2 ☐☐☐☐ -----
3 ☐☐☐☐ -----
4 ☐☐☐☐ -----
5 ☐☐☐☐ -----
6 ☐☐☐☐ -----
7 ☐☐☐☐ -----
8 ☐☐☐☐ -----
9 ☐☐☐☐ -----
10 ☐☐☐☐ -----
11 ☐☐☐☐ -----
12 ☐☐☐☐ -----
13 ☐☐☐☐ -----
14 ☐☐☐☐ -----
15 ☐☐☐☐ -----
16 ☐☐☐☐ -----
17 ☐☐☐☐ -----
18 ☐☐☐☐ -----
19 ☐☐☐☐ -----
20 ☐☐☐☐ -----
21 ☐☐☐☐ -----
22 ☐☐☐☐ -----
23 ☐☐☐☐ -----
24 ☐☐☐☐ -----
25 ☐☐☐☐ -----

1 2 3 4
T F

26 ☐☐☐☐ -----
27 ☐☐☐☐ -----
28 ☐☐☐☐ -----
29 ☐☐☐☐ -----
30 ☐☐☐☐ -----
31 ☐☐☐☐ -----
32 ☐☐☐☐ -----
33 ☐☐☐☐ -----
34 ☐☐☐☐ -----
35 ☐☐☐☐ -----
36 ☐☐☐☐ -----
37 ☐☐☐☐ -----
38 ☐☐☐☐ -----
39 ☐☐☐☐ -----
40 ☐☐☐☐ -----
41 ☐☐☐☐ -----
42 ☐☐☐☐ -----
43 ☐☐☐☐ -----
44 ☐☐☐☐ -----
45 ☐☐☐☐ -----
46 ☐☐☐☐ -----
47 ☐☐☐☐ -----
48 ☐☐☐☐ -----
49 ☐☐☐☐ -----
50 ☐☐☐☐ -----

1 2 3 4
T F

51 ☐☐☐☐ -----
52 ☐☐☐☐ -----
53 ☐☐☐☐ -----
54 ☐☐☐☐ -----
55 ☐☐☐☐ -----
56 ☐☐☐☐ -----
57 ☐☐☐☐ -----
58 ☐☐☐☐ -----
59 ☐☐☐☐ -----
60 ☐☐☐☐ -----
61 ☐☐☐☐ -----
62 ☐☐☐☐ -----
63 ☐☐☐☐ -----
64 ☐☐☐☐ -----
65 ☐☐☐☐ -----
66 ☐☐☐☐ -----
67 ☐☐☐☐ -----
68 ☐☐☐☐ -----
69 ☐☐☐☐ -----
70 ☐☐☐☐ -----
71 ☐☐☐☐ -----
72 ☐☐☐☐ -----
73 ☐☐☐☐ -----
74 ☐☐☐☐ -----
75 ☐☐☐☐ -----

Hospital Corpsman 1&C
NAVEDTRA 10670-B

PRINT OR TYPE

NAME ______________________________ ADDRESS ______________________________
Last First Middle Street/Ship/Unit/Division, etc.

____
City or FPO State Zip

RANK/RATE ________ SOC. SEC. NO. ______________________ DESIGNATOR ________ ASSIGNMENT NO. ________

☐ USN ☐ USNR ☐ ACTIVE ☐ INACTIVE OTHER (Specify) ________________ DATE MAILED ________

SCORE ☐

1 2 3 4
T F

1 ☐☐☐☐ _____
2 ☐☐☐☐ _____
3 ☐☐☐☐ _____
4 ☐☐☐☐ _____
5 ☐☐☐☐ _____
6 ☐☐☐☐ _____
7 ☐☐☐☐ _____
8 ☐☐☐☐ _____
9 ☐☐☐☐ _____
10 ☐☐☐☐ _____
11 ☐☐☐☐ _____
12 ☐☐☐☐ _____
13 ☐☐☐☐ _____
14 ☐☐☐☐ _____
15 ☐☐☐☐ _____
16 ☐☐☐☐ _____
17 ☐☐☐☐ _____
18 ☐☐☐☐ _____
19 ☐☐☐☐ _____
20 ☐☐☐☐ _____
21 ☐☐☐☐ _____
22 ☐☐☐☐ _____
23 ☐☐☐☐ _____
24 ☐☐☐☐ _____
25 ☐☐☐☐ _____

1 2 3 4
T F

26 ☐☐☐☐ _____
27 ☐☐☐☐ _____
28 ☐☐☐☐ _____
29 ☐☐☐☐ _____
30 ☐☐☐☐ _____
31 ☐☐☐☐ _____
32 ☐☐☐☐ _____
33 ☐☐☐☐ _____
34 ☐☐☐☐ _____
35 ☐☐☐☐ _____
36 ☐☐☐☐ _____
37 ☐☐☐☐ _____
38 ☐☐☐☐ _____
39 ☐☐☐☐ _____
40 ☐☐☐☐ _____
41 ☐☐☐☐ _____
42 ☐☐☐☐ _____
43 ☐☐☐☐ _____
44 ☐☐☐☐ _____
45 ☐☐☐☐ _____
46 ☐☐☐☐ _____
47 ☐☐☐☐ _____
48 ☐☐☐☐ _____
49 ☐☐☐☐ _____
50 ☐☐☐☐ _____

1 2 3 4
T F

51 ☐☐☐☐ _____
52 ☐☐☐☐ _____
53 ☐☐☐☐ _____
54 ☐☐☐☐ _____
55 ☐☐☐☐ _____
56 ☐☐☐☐ _____
57 ☐☐☐☐ _____
58 ☐☐☐☐ _____
59 ☐☐☐☐ _____
60 ☐☐☐☐ _____
61 ☐☐☐☐ _____
62 ☐☐☐☐ _____
63 ☐☐☐☐ _____
64 ☐☐☐☐ _____
65 ☐☐☐☐ _____
66 ☐☐☐☐ _____
67 ☐☐☐☐ _____
68 ☐☐☐☐ _____
69 ☐☐☐☐ _____
70 ☐☐☐☐ _____
71 ☐☐☐☐ _____
72 ☐☐☐☐ _____
73 ☐☐☐☐ _____
74 ☐☐☐☐ _____
75 ☐☐☐☐ _____